Vol 8 No 7

July 1991
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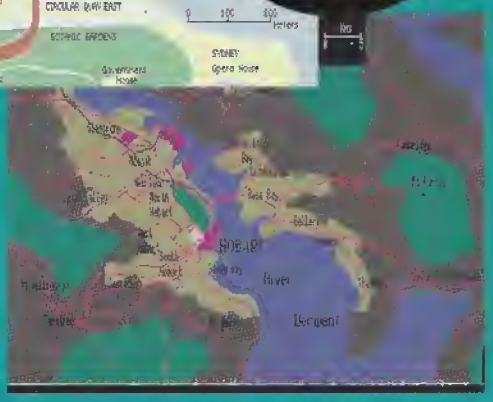
The Australian COMMODORE and AMIGA REVIEW

Australian Graphic Atlas

AmigaVision at Work

Savannah
Shrub Steppe
Mallee
Mulga Scrub
Grassy Scrub
Sclerophyllous Grass Steppe
Desert Steppe
Desert

FULL REVIEW
Miracle Piano Tutor



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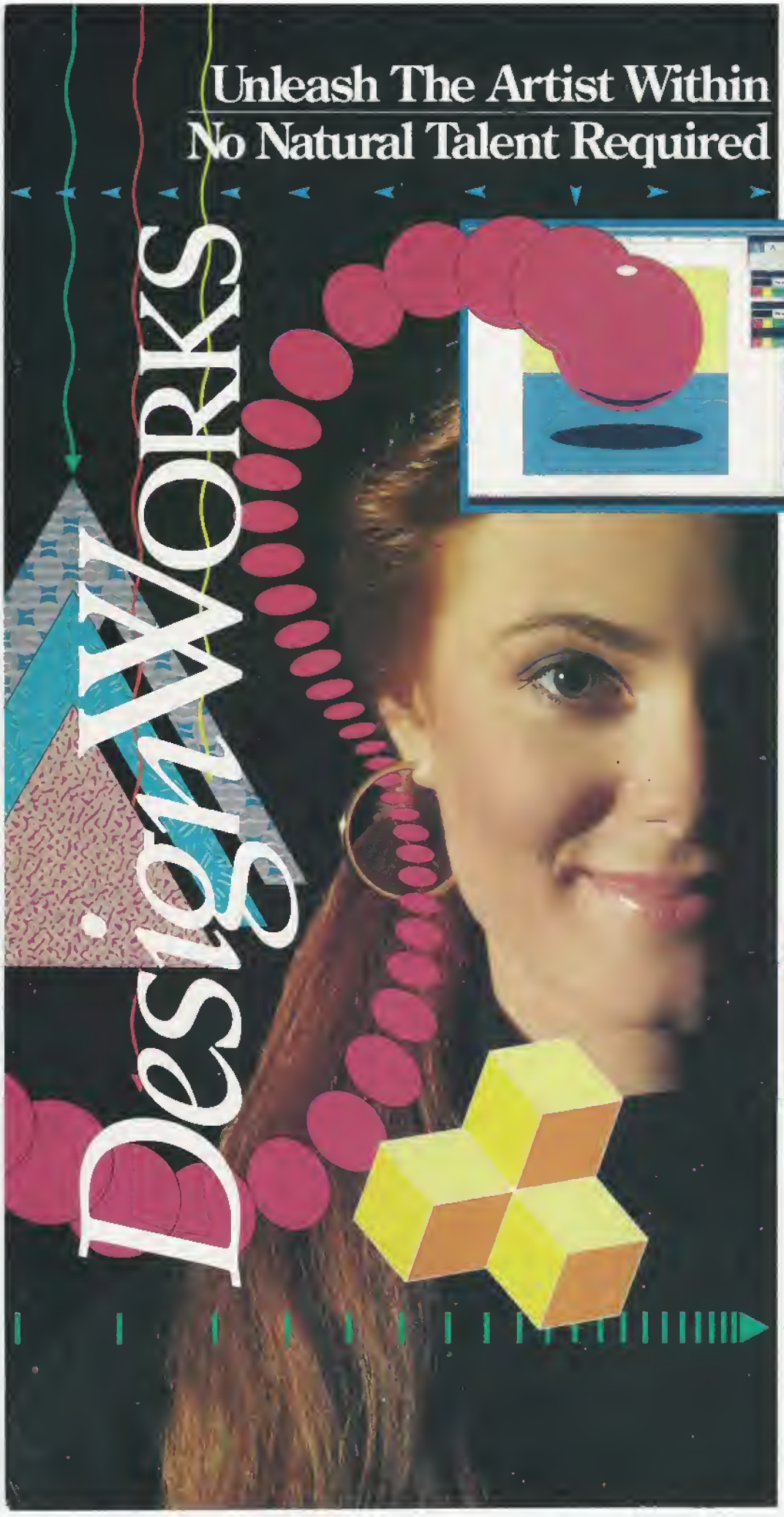

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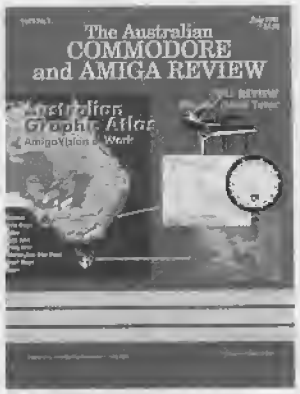

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Editorial

Scrape together a few out of control Amiga fans, teach them how to speak English and carefully place them in the well arranged surroundings of a Computer Spot store - preferably at Bondi Junction, Sydney - open the front doors and invite along one 2MMM's Rocket Reg Prisard to kick off the show and you have the grand opening of yet another recession beater. That's right, the guys at Spot have opened yet another great store, so be sure to check it out.

Despite all the doom and gloom, the home computer industry is growing, and Commodore is still selling more home computers. Parked around the corner CDTV is waiting to happen. In many ways now is an ideal time to launch it. Only those who can truly afford and don't mind waiting for the rush of applications will buy.

They will be the feeding ground of earlier not so polished titles. They will also be the fuel for companies preparing some very exciting discs in the not so distant future. By then, things will be rising out of the u-bend of one almighty J-curve and we'll all be buying CDTV players - and affording it a lot better than most of us can now.

For Commodore things have never looked so good. The World of Commodore Show will see the launch of CDTV. It will see a number of important international companies turn their attention downunder long enough to realise we deserve more attention than we're currently rating. We should see a flood of new products - well, new to us downunder - and a little bit of shuffling amongst the distributors to see who lands the "exclusive" rights to distribute what.

Morale at Commodore and amongst the users will be up, people will be looking forward to a better range of hardware, new software and the new CDTV platform for developing titles and using this new fangled electronic multimedia education and entertainment juke box.

All this bids well for the Amiga industry. It also bids wells for us here at *Australian Commodore and Amiga Review*. The number of advertisers will grow, we can make a bigger magazine, more people will read it, and the editor will be given a raise. So, 1991 might turn out to be a good year after all.

Andrew Farrell

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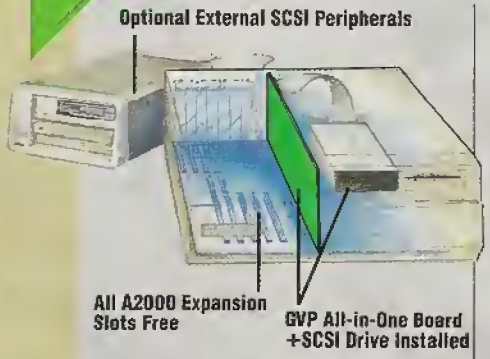

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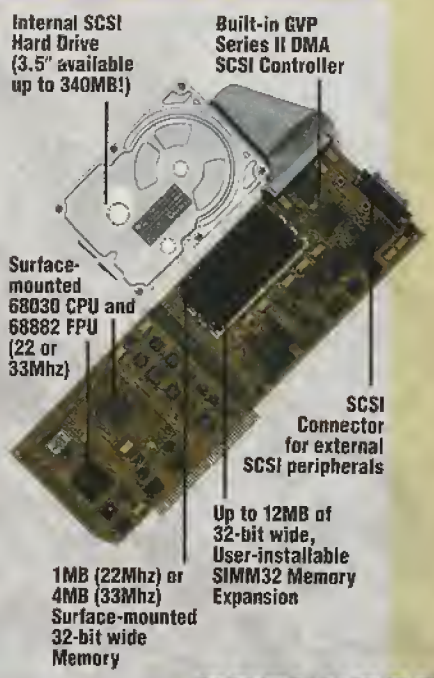

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68030 CPU and 68882 FPU	Y	Y	Y
Maximum CPU clock speed available & shipping TODAY	33Mhz	25Mhz	25Mhz
Maximum 32-bit wide FAST memory on 68030 CPU board	16MB	4MB	16MB
Direct DMA access to more than 8MB of fast memory	Y	N	Y
DMA SCSI controller built-in on 68030 CPU board	Y	N	Y
Number of open Amiga expansion slots with 68030 CPU, SCSI controller and more than 4MB fast memory installed	5	3	4
RAM upgrades through easy-to-install 32-bit wide SIMM memory modules	Y	N	N

GVP

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Ram Rumbles

Is your software legal?

Are you aware that there is a distinct difference betwen Shareware programs and Public Domain software? Unregistered Shareware software is a direct breach of the Australian Copyright Law. Many people don't realise this, and think it is much the same as true public domain software. The confusion stems from the fact that many Shareware titles are available through similar channels. Unlike traditional commercial software, Shareware titles may be freely distributed. However, if you decide to use a program, you must register with the copyright owner and pay the license fee. Not doing this would place you in breach of the agreement you made by running the software.

Public Domain software is free - all you pay for, if anything at all, is the service of duplicating the disk, handling and delivering your order. Be careful, some public domain disks contain other programs which are Shareware. Be sure to register these if you plan to continue using them!

Media Spottings

Amiga's are popping up all over town! Ms L M Ainsworth of Tenterfield had her eyes peeled when she spotted a number of Amigas at work and in the media. First up was the usual *Neighbours* spotting of an Amiga 500, this time it was being used to run the Lassiters Complex. An Amiga 500 package was also spotted by our keen eyed reader as a major prize on *Family Fued*. You'll also see an Amiga 500 as a prize on the show *Now You See It*. It's great to see the Amiga at centre stage being offered as valuable prizes in such high profile shows. Thanks Lisa - ring our editorial office for two free public domain disks of your choice.

Mark Wake of Albany has spotted Amigas around the traps, including his local television station. Also spotted was an Amiga in the Kleen Heat advertisement. In this a boy is taken home by car with a driver. At the end of the advertisement we see the same boy playing on his Amiga. Ring us for one free public domain disk Mark.

Mr. A Gormly, (did we get the name right this time?), has spotted a secretary using a spreadsheet on an Amiga 2000 in the comedy movie *The Gods Must Be Crazy II*. This is one of those movies you have to see to understand. When I first saw Part I we missed the start and thought we were watching some kind of short, until the movie had gone so long we figured this must be the feature. Anyhow, the Amiga is in there. Ring us for a free public domain disk Andrew!

International computer pen friends

Wangaratta Primary School have joined the ranks of happy Amiga users. During International Writers Week last year, some 60 students - 10 and 11 year olds - used their four Amiga 500s to answer questions from Victoria, Queensland, the Northern Territory and even as far distant as Scotland and Alaska. "We chose as our author the South Australian writer Max Fatchen," said senior teacher Peter Gerdsen. Max Fatchen is a successful children's book author and some of his grandchildren attend the school.

Having contacted other Australian and overseas students, the Wangaratta pupils then forwarded their questions to Fatchen. Responses were posted back to the students using a Keylink, a type of Bulletin Board System. At the Amiga end the school used *JR-Comm*. (Hopefully they were registered copies!)

The school has been impressed by the Amiga's value for money. The machine are in constant use carrying out many different activities from week to week. The only problem now is that the school needs more machines! ❑

UPDATE COLUMN

Once again, an International Update Column. I am currently in the middle of an overseas trip, looking at hundreds of new and exciting goodies to bring back to Australia. In the meantime I have several brilliant new products to tell you about.

RED SECTOR DEMO MAKER - We've all seen those fabulous demos on the Amiga. Now, Abacus (the Amiga book specialists) have released RED SECTOR DEMO MAKER. This program is simple to use, but places all of the Amiga's powerful graphic capabilities at your fingertips. A raw novice can churn out professional looking demos in literally seconds!

LORDS OF CHAOS - Take a journey to a mystical land where Arch Mages battle for supremacy in strange, magical worlds - battle to become the Lords of Chaos. 1 to 4 players can battle against each other in this brilliant role playing game.

LUPO ALBERTO - Remember back when arcade games were simple, cute and fun to play? LUPO ALBERTO recalls all of that but with amazing cartoon-style graphics. Incredibly playable. See you at the Show! ❑

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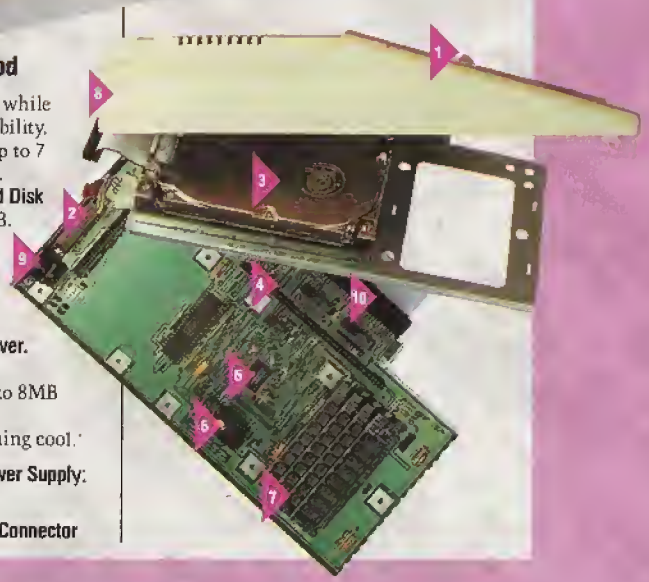

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Notepad

News in Brief

Lots of Amigas - More than 3 million Amigas have been sold world-wide, mainly in Europe. That's a serious number, even a critical mass (well, some of us are critical).

Workbench 2.0 - You guessed it, still no word about the release of the new version of the Operating system.

Workbench 1.3.3 - Ask your dealer if this is available - various printer drivers, parallel and printer.device, and several C programs including setpatch have been updated.

Amiga Awards

Yes, it was voted Multimedia Package of the Year by a panel of international computer journalists at the European Computer Awards, getting twice as many votes as the nearest rival, *Macro Mind Director*. The same panel voted the A500 as Home Computer of the year for the second year running and *DPaint III* got the Best Art Package award. *Lemmings* won the Game of the Year, and Psygnosis got a bunch of awards in the leisure section. Other awards: *Bars & Pipes* - Best Music Package; Video Toaster - most innovative Peripheral and *Fun School 3* for Best Home Education package.

The impossible - Amiga puffed in PC mag!

John Campbell from Padstow, he with the eagle eye, has spotted an article in the Feb PC Week mag in which the author looks at the Amiga/Video Toaster *combo and suggests that "..a PC, an Amiga, and a Toaster combination is the video production equivalent of life in the early days of desktop publishing. For a small investment, and tolerance of some idiosyncrasies, you can get most of the performance that would otherwise require tens of thousands of dollars of specialised professional equipment." Apart from the necessity for a PC (why?), it's nice to see such things written by the profane about our favourite computer, eh?* The Toaster *may just make the difference to the Amiga in America.*

New Horizons Software buys CCS

Yes, you'll have to get your upgrades to *Quarterback, Quarterback Tools, MAC-2-DOS, DOS-2-DOS*, etc from the new owners at PO Box 43167, Austin TX 78745 USA (Tel: 512 3286650). All activities will be moved to Austin. New Horizons are responsible for *ProWrite* and other good software.

Rumour quashed

There was a rumour to the effect that Quantel (of PaintBox fame) was throwing legal knives at MAST as a result of ColorBurst's allegedly using Quantel's patents - well, it isn't so, just a misunderstanding of an article in *Amazing Computing*. .

Clarification - A1500 v. Amiga 1500

In Oz, we see neither of these, but do read about them, and I've been asked what gives. There's a bit of confusion here, and the story is this - the Amiga 1500 is a marketing ploy from Commodore UK to address the fact that the Brits keep a closer watch on the wallet than other markets. It refers to a basic A2000 equipped with two disk drives and a new name plate.

The A1500 is a third party expansion system/replacement chassis for the A500 - you take the A500 apart and stick its innards into a new box, and get capacity for two drives, one of which could be a hard disk; as well as 2000-style cards and a video slot, and a detachable keyboard.

Gossip

Imagineering has been de-listed on the Stock Exchange, which indicates that things are even worse than the recent price of 5 cents/share indicated. The specific reason for de-listing is given as the fact that no annual report was produced for the company this year. How the mighty have fallen - my impression of the company over the last couple of years was of increasing organisational and management looseness, and nobody seemed to care.

Canon FP 510 Printer driver

Greg Perry has created a driver for this printer, commissioned by Canon, so if you have this printer, call Canon for more information. He also claims the driver can print 24-bit colour to the printer.

IBM Emulator

Quoted from a PR thing on UseNet: "This emulator is specifically written for the 68020/030 processors. It will only run on machines which are equipped with one of these processors, eg a 2500/20, 2500/30 or 3000.

"The IBM emulation includes complete 8088 emulation, CGA graphics support (including both 40 and 80 column text), hard disk support, floppy disk support. There is at the moment no serial or parallel port support.

"The emulator requires that you have at least two megabytes of fast RAM in your system (standard with 2620 or 2630 cards).

"While it has not been tested on an Amiga 3000 or on WB 2.0, the program is completely legal in all its OS calls, and should run without problems. The emulator does not take over the entire computer and runs simply as a task.

"Users will have to provide their own copy of MS-DOS."

Anyone wishing to get the version without these limitations can send US$30 to: Mark Tomlinson, 30 Kirner St, Christchurch 9 New Zealand.

By the way, keep your eyes on this space for news of a home-grown IBM emulator which should be announced before too long.

Byte 'N' Back hard disk backup

Spirit Technology (they of the Insider Boards, etc) have released this utility which is said to do a disk in 50 seconds in non-verify mode, and to squeeze 935K onto each one. Has "drag by group" file selection, and will let you

Continued on p8

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22Mhz, 1Mb RAM
$1,699
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know how many disks required for back-up. WB2 compatible. Cost is US$69.

Info from: 220 West 2950 South, Salt Lake City, UT 84115 USA. Tel: 801 4854233.

Commodore clip sounds

Called Amiga Clips, this is the first in a series of Sound Effects, or "multi-media building blocks" as the blurb has it - digitised sounds for your *AmigaVision* productions, or anything else I guess. All kinds of types of sounds, a potpourri indeed. Available from ComputerMate. (We have also added a huge range of PD sounds to our Public Domain Library available through Prime Artifax (02) 879 7455.

Maple - computer algebra system

This comes with libraries containing routines for doing every level of maths from basic algebra and trigonometry up to advanced calculus and differential equations. It can handle problems in complex variables, statistics and linear algebra, and solutions are given symbolically, in terms of algebraic expressions and variables, as well as Fortran code, if you want. Needs 1 meg of ram and 10 meg of hard disk. Info from: Waterloo Maple Software, 160 Columbia St West, Waterloo, Ontario, Canada N2L 3L3. Tel: 519 7472373.

DTP clip art

There's quite a flood of such stuff coming out now, this lot of two disks being from Softwood Inc. All high-resolution IFF brushes, meaning you can import them into your DTP or Paint package with no trouble. Wide variety of themes. Available from ComputerMate, Sydney, Tel: 02 4578388.

KCS 3.5 with level II - Midi sequencing

This sequencing program works on all Amigas, and looks very powerful. It has tapedeck-style controls; Tiger Graphic editing, piano-roll style; quickscore Note printing to all printers; Automix MIDI mixer with 2 16-channel banks of MIDI sliders; Programmable Variations Generator & Master Editor, ie tools for creating variations from existing material, on 16 screens! To be comfortable, it's good to have 2 meg of Ram and a hard disk, but lesser systems can still use it. Available from ComputerMate.

Interesting Online Service

Jon Barnard, who runs this newly set up service, went to great pains to stop me referring to his "BBS". He calls it "Australia's only free-access on-line information and purchasing service", something of a mouthful. So you can buy products, often at discount, and have them delivered within 24 hours (he claims!). He also has a lot of PD for IBM computers, a matter of virtually

Continued on p10

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THE MIRACLE
PIANO TEACHING SYSTEM

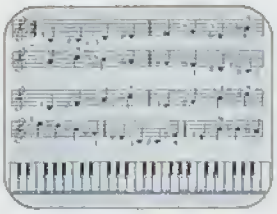
Pinch yourself, this could actually happen.

You slip into the family room one evening and discover your nine-year-old, parked in front of his Commodore Computer System, eyeballs aimed, like twin laser, at the images on a video screen. Only guess what? No video games are anywhere in sight.

Instead, beneath his dancing fingers, rests a startlingly high quality, full-stereo, piano keyboard.

The screen is ablaze - not with hairy creatures from space - but with lesson six from an ingenious piano-self-teaching program.

Music fills the room. And yes, it is your very own non-musical wonder-child who is creating these magical sounds all by himself.



Strangest of all, this otherwise squirmy adolescent of yours has been hunched over his keyboard for an hour, with no interruptions.

So what gives?

Well, what gives is a piano unlike anything you've ever seen before. A piano that actually teaches you how to play it. And, with advanced MIDI technology, and Commodore computer software, this electronic keyboard instructs in a way that is easy to learn and totally absorbing. It's a Miracle.

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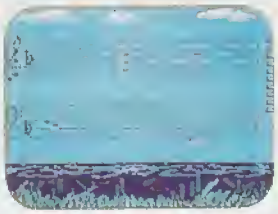
- Advanced audio technology with over 100 instruments and sounds in full stereo!
- Learn to read music, play songs in rhythm and teach yourself two-handed piano pieces.
- Artificial intelligence creates a special series of dynamic, effective piano lessons.
- Over 200 lessons and 40 musical pieces in the program!
- The Miracle hooks up to your home stereo or personal music system for enhanced sound.

A PATIENT TEACHER

What drives piano students up a wall is the repetitive nature of their practice routines.



The Miracle Piano Teaching System is very different. You learn at your own pace, working on super-creative, artifically intelligent software that won't scold you or rap your knuckles whenever you mess up.

Amazingly, the program tailors its lessons to each user, helping you glide, almost effortlessly, past your worst mistakes and problem areas.

As you learn to play chords and two-handed pieces, your progress is rewarded with a knockout surprise: fully digitized, stereo sounds that well up and virtually surround your music with accompaniment.

Psychologists would probably slap a label, like "positive reinforcement" on this technique. Fine: We think in simpler terms. It's just fun.

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negative interest to readers, I guess. Sellers are encouraged to apply to sell on the service. Get onto Computer INFO by calling 02 7463000.

Faxteller

Only $145, and you get everything the other fax switches do (like the BIT PhaxSwitch), plug your phone line in, one line goes to handset, other to fax machine, and when the phone rings, it instantly detects whether fax or not; if not fax, the phone starts ringing again. Means you can also use your answering machine on one line. From : Diamond Technology, Gardeners Rd, Rosebery, NSW Tel: 02 6674068.

Black workstation for A500

If you'd like a detachable keyboard for your A500, and are fairly handy with a screwdriver, get Pre'Spect Technics "Black Workstation" case. Remove your motherboard and keyboard and put them in Pre'Spect's US$320 case, and you get something that looks like a slim black Amiga 1000. Info from: 1085 St. Alexandre, Suite 500, Montreal, Quebec, Canada H2Z 1P4. Tel: 514 9541483.

Velocity-sensitive qwerty keyboard

A company called SmartTek in the US has come up with this, the main benefit being that it can differentiate between soft and hard key hits, and put down BOLD text when it feels the hard press when typing into most word processors and text editors. There have been such devices in the music world for a while, but none in computers to date.

"Hydras"

That is, a nice name for the imminent combination laser printer/ fax / scanner / copier. I say yea! Terrific saving of space, wastage, money, etc. and appealing to that sense of multi-functionability. The only nay is that if one part breaks down, the whole lot goes, but that could be avoided if they invent machines that never break down... [Thanks to John Campbell for this info.] John goes on to wonder whether the Kodak Ektaplus 7016 printer, about which he also sent info, is the first Hydra to come along, since it not only handles Postscript, Appletalk, four ports, and six emulations, but also contains a "convenience copier".

Use your video as a tapestreamer

Since tapestreamers and VCRs use similar magnetic tape, a Californian company called VidiTools have come up with its *VidiBack* software for the Amiga. It uses a combination of an A520 modulator and any colour digitiser such as NewTek's Digiview 4, and contains all the leads you need to conect the kit uup to a VCR with a SCART connector (like the one in the back of your monitor). So VidiBack

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reads and writes files through the modulator's composite video port to the VCR, and restores them by connecting up *DigiView* with the same lead and the data is read in through the parallel port on the back of the hard drive. Price probably about US$50.

Maxi-sketch

A 1000-dpi drawing tablet that can be attached to any Amiga. The tablet has auto-configuring capabilities which allows it to emulate several types of graphics tablets, such as Summagraphics, Calcomp, Hitachi *and even the Amiga keyboard. RRP=$US499.95. More info from: Centaur Software 4451-B Redondo Beach Blvd Lawndale CA 90260 USA Phone: (213) 542 2226.*

8 megs of ram for your A500

Gives you up to 8 meg, with optional 68010/68881 processors, fits inside the A500, and is compatible with the A501 half-meg upgrade. Called the EXP-8000+, this is the Ram expander for the ambitious A500 user. Distributed by ComputerMate, Tel: 02 4578388.

Bridgeboard newsletter

"Crossings" is the name, US$40 (plus air mail costs) for 12 issues of approx 70 pages each. Just the ticket if you're a bit confused about using your BridgeBoard. Info from & cheque to: Deland Editorial Services, Ste 115, 1646 2nd Ave, New Yord, NY 10028.

Object-oriented user interface builder for AREXX

All I know is that it is on the way from TTR Development in the US. The same bunch is also releasing a Teachers' Toolkit, *with gradebook, lesson planner, etc. Watch this space.*

Oz comms directory

Called "Directory of Electronic Services and Communication Networks in Australia and New Zealand", this compilation by Paul Budde details about 300 electronic services available in Australasia. It is probably aimed more at the corporate world, as reflected in the price of $195 for the book with three quarterly updates, but if you need the info, here it is. Contact: 049 988144 or Fax: 049 988247.

Chaos catalogue

A well-organised company called Frachaos has set itself up to collect all kinds of chaos and fractal-related material, such as videos, books, software, prints and so on. Also included are contact addresses for enthusiasts. Find more info in dimension 3.11 at: Higher Trengrove, Constantine, Falmouth, Cornwall TR11 5QR UK. Tel: (0011 44) 3326 40973.

(This month's Notepad provided courtesy of Tim Strachan, editor and publisher of that Megadynamic magazine on a disk for Megaheads. Find out more on (02) 959 3692.)

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World of Commodore Show Guide

July 12-14
Darling Harbour Exhibition Hall, Sydney

A stage has been prepared, the actors stand at ready, the scenery is complete and soon the audience will have gathered for the first true Australian World of Commodore Show. If you dig back over past years you will find editorial after editorial lamenting the fact that there was no large scale Australian show devoted to Commodore equipment. User Groups have done an excellent job at attempting to fill this gap.

Of course, if you plan on attracting the calibre of exhibitor who is going to make such an event truly worthwhile you need a big venue with a guarantee of lots of visitors.

Commodore have chosen Sydney's Darling Harbour as the location, certainly a fine place to hold such a show. Potential visitors will hear about the show through various forms of the media. With serious money behind this effort, companies from as far abroad as the United States will be venturing downunder to display their wares. Next year's show will be even bigger, after all, what American sales or marketing person would knock back a holiday in Australia.

Apart from exhibitors, the show will extend to visitors the opportunity to attend a number of seminars on various application areas of the Amiga.

Subjects covered by the expert presenters include CDTV, music, professional video, multi media, animation and graphics. All these seminars are held every day of the show - see page 17 for full details. No doubt those retailers at the show will also be offering a number of never to be repeated bargains on everything from extra drives to the computers themselves.

So who will be there? Here's our "no guarantees" guide to some of the products and people to look out for.

Commodore

The main feature on the Commodore stand will be CDTV - Commodore Dynamic Total Vision, CD player plus television plus Amiga. A major new development, worth visiting the Show just to see it. For lots of information on CDTV see the June issue of *Australian Commodore and Amiga Review*.

Commodore will have many other fantastic goodies on show, of course, including *Mandala* virtual reality software.

Emphasis will be on real life situations - there will be a classroom, a library, a research centre, an office, a loungeroom, a video laboratory, a music centre, and a teenage bedroom., with Amigas and/or CDTVs in use in all these settings. Regular presentations will be made, with large screen TVs so that everything can be easily seen from the perimeter of the stands.

In the classroom section you can see *Australian Graphics Atlas* (review on page 30 of this issue, pictures on the front cover).

M.A.S.T

Memory and Storage Technology, or **MAST** as it is better known, is the largest Australian Amiga peripheral manufacturer. Although they started out producing a small range of disk drives and memory expansion boards, in recent times the range of hardware produced by the company has grown considerably.

They now boast offices in the United States, Germany, Austria, Sweden and the U.K not to mention downtown Sydney, Australia. The products are actually manufactured in the U.S.A. although the company is still wholly Australian

owned. A new German facility means **MAST** will be ready for the opening up of free trade in Europe in 1992. **MAST** recently won a Nevasa Award for New Industry, however their most acclaimed product is the 16.7 million colour generator known as *ColorBurst*.

At the show you will be able to see a wide range of products in the areas of graphics, sound, MIDI and sound, still video, accelerators, monitors, genlocks and more.

The main feature attraction will be the *Colorburst 24* bit graphics display and painting system. Designed by local whiz kid, Gary Rayner, MAST engineers have since improved the design and *Colorburst* is now available. The graphics quality of this device has to be seen to be believed.

Flash 2000, a SCSI/RAM card is another new release. Unlike other cards currently available, MAST promise this one will come with an unbeatable price. We wait with bated breath.

SAM is **MAST's** new SMPTE/MIDI interface. It will provide a complete MIDI interface (1 in, 4 outs) along with serial pass-through and the most flexible Amiga SMPTE box on the market. With its ability to read and write SMPTE timecode both forwards *and* backwards, at a wide range of speeds, along with compatibility with all programs that support MIDI Time Code (MTC), this is an important new product for the multimedia and music markets.

MAST are also mentioning the ever rumoured *Infinity Machine*. We have word that the design may have changed considerably yet again - so be there on the **MAST** stand to check it out.

Other products on the stand will include the *Canon Ion Still Video Camera*, large screen Sony monitors, Australian Genlocks and more.

Pactronics

A long time player in the Commodore market, **Pactronics** distribute a range of products including both hardware and software. They have a strong range of educational software, some popular games and creative packages such as *AMOS* and a number of interesting hardware items including Scanners and *Action Replay II*. Many of these items will be demonstrated at the show along with a couple of interesting new titles.

Red Sector DemoMaker is ideal for Amiga owners into graphics. If you are remotely familiar with the great graphic demonstrations emigrating from Europe you've been impressed with their smooth scrolling and outstanding sounds merged into a single, dynamic presentation. *Demomaker*, from **Abacus**, lets you create these dazzling displays quickly and easily with little or no programming experience.

Almost all functions of the program can be accessed using menus. Your IFF graphics and fonts can also be merged with *DemoMaker's* code allowing you to customise your demonstration to your specifications. It's so easy to use that even new Amiga owners can generate professional quality graphic and sound effects using: floating text, vector graphics, BOB effects, 3D star routines (with user definable sprites), and sounds from any music development program. Your finished demonstrations can be run as bootable programs or as stand-alone Tools.

Minimum hardware requirements: Amiga 500, 1000, 2000 & 3000 with one disk drive, one megabyte of RAM and PAL video display.

Wordworth joins the ever growing fray of Amiga wordprocessors. This program has a Workbench 2.0 look and feel (even with WB1.3), HIP (Human Interface Protocol), a graphical environment which integrates Workbench 2 and automates the way you work. According to the publishers, the program is predictable, consistent, and you will find HIP both friendly and intuitive.

The package features a full WYSIWYG interface showing typeface, style, colour, headers/footers, page breaks etc. You can use up to 255 screen fonts, mixed freely on screen with support for ColorFonts. Multi-line, mixed font, headers and footers (left and right) are displayed on screen.

For those who care about their working colours, you can create your own colours for background, text and system requestors. File formats supported - ASCII, *Kindwords*, IFF, *Protext*, *ProWrite* and *WordPerfect*.

Other options include on-line help (optional interactive help) and a British English spell checker is provided by Proximity/Collins Linguibase 110,000 word dictionary, hyphenation, 26,000 Merriam-Websters legal and medical supplement, check word, document or as you type. British English Thesuarus is provided by Proximity/Collins - thirty thousand headed words, 140,000 cross references. There's a glossary - storing standard phrases.

If you're in a relaxed mood, the speech option might come in handy - the program speak selections includes whole document, speak as you type, voices - male, female, robot, natural (variable pitch/speed).

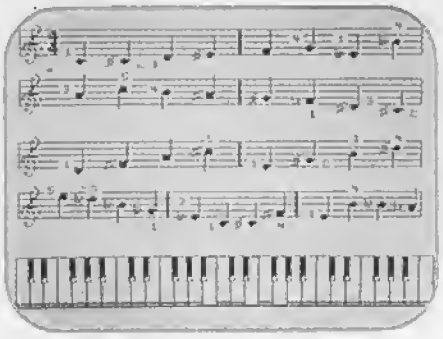
Not copy protected, *WordWorth* was written specifically for the Commodore Amiga, fully supports Workbench 1.3, 2.0. Minimum requirement is an Amiga A500 with 1MB RAM. Supports all medium or high resolution modes, PAL or NTSC.

Pactronics will also be releasing at the Show *Fun School* on CDTV. There will be specials - pricewise - on many Amiga products. They will be demo-ing *AMOS Compiler* as well, which is a brand new product being released at the end of this month. There will also be numerous other products at the show.

Mindscape

Mindscape have devoted their whole stand to the amazing new piano teaching system, The Miracle. (See the full review on page 18 of this issue of *Australian Commodore and Amiga Review*.)

There will be continuous demonstrations of The Miracle by an expert, so don't miss the chance to see it. When you have seen the demonstration, fill in a form to be in the draw to win a Miracle. The draw takes place at the Show.



Digital Micronics

Be sure to stop by this stand for a look at **Digital Micronics** high resolution graphic co-processors designed for the Amiga. The DM1010 *"Resolver"* is a 60Mhz co-processor based on the Texas Instruments 34010 graphics processor.

The Resolver features maximum resolution of 1280 x 1024 with eight bit display and a 16.8 million colour palette. This board comes standard with 1024 x 768 resolution, two megabytes of program RAM and over 1.3 megabytes of video RAM. Upgrade options include double buffered 1024 x 768 resolution and 1280 x 1024 resolution with either single buffering or double buffering. Program RAM can be upgraded to a maximum of eight megabytes.

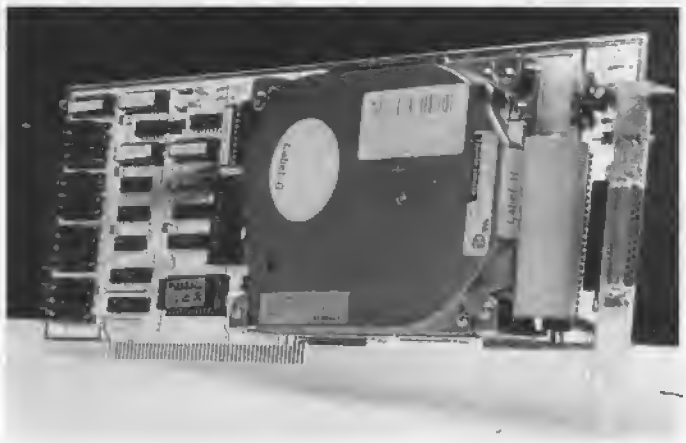
Also under development is the *DM1020 graphics co-processor*, which is based on the Texas Instruments 34020 graphics processor and features 1280 x 1024 x 24 bit graphics display and a 16.8 million colour palette. Upgrade options will include the Texas Instruments 34082 math co-processor and double buffering of video memory. The DM1020 board is scheduled for shipment in the autumn of 1991.

Both systems offer performance features that, until now, have been available only in high end workstations. To support these high resolution systems, DMI has available a full line of quality monitors ranging from 13" to 36".

GVP

GVP have a number of exciting hardware products lined up for the show including their latest accelerator cards, and a new colour display card. Also now available is **GVP**'s first software package. *Scala* is one of the best presentation packages around - a professional presentation software package with some excellent wipes, fades, fonts and easy to use menus.

GVP products are distributed locally by Power Peripherals.



GVP Hardcard

Merit Software

Specialising in CDTV application, **Merit** plan to have *Classic Board Games - CDTV, All Dogs Go To Heaven - CDTV, Operation Combat, Medieval Warriors, Tracon II, MoonBase, Sesame Street Crayon - Letters for You, Sesame Street Crayon - Numbers Count, Sesame Street Crayon - Opposites Attract.*

Merit Software released *Classic Board Games for CDTV*, featuring three favourite board games: chess, checkers and backgammon.

This collection of games was designed specifically for CDTV so the players can relax in their favourite easy chair and control the game moves easily with the CDTV remote control unit. Audio and other narrative directions and pay-by-play updates can be heard in six different languages including English, German, Japanese, French, Spanish and Italian. Players pit their skills against the computer and can chose from various difficulty levels. Players can also play another opponent, but whatever choice, players will find *Classic Board Games, CDTV*, the ultimate in home entertainment.

Merit Software recently announced the production of a new electric crayon package for CDTV, *All Dogs Go To Heaven Talking Crayon* based on the animated film by Don Bluth.

As the name implies, this electric crayon package "TALKS!" Words and actual music from the *All Dogs Go To Heaven* sound track accompany all 30 colouring book pictures making the game a delight for both children and the young at heart. This is the sixth electric crayon package produced by **Merit** Software.

In addition to the special audio and music, the game transforms the player's television into an electronic colouring book and colouring is made easy by use of the CDTV remote control unit. Audio instructions are available with a touch of a button. *All Dogs Go To Heaven Talking Crayons* is a must for young and old alike!

Medieval Warriors, a new product from **Merit** Software, challenges users to test their military strategies and skills in a medieval setting. Each army is comprised of 12 animated warriors which move and fight upon command, with bow, knife, axe or sword.

Users may pit their skills against those of the computer or another human player, either on a single computer or over the telephone with two computers via modem.

New Horizons

New Horizons will be exhibiting their complete line of productivity software, including *ProWrite*, a full featured graphics-based word processor, *Quick Write*, a high performance entry-level word processor, and their most recent release, *Design Works*, a fast and easy to use structured drawing program. New Horizons will also be previewing *Flow 3.0*, the latest revision of their outline processor.

New Horizons has made its name in the Amiga software market by providing high performance, easy to use, bugfree software that meets users' needs. Their participation in the World of Amiga show in Sydney will help build a broader awareness in Australia of the company and their product line.

In addition to **New Horizons'** productivity software, the line of utility software from **Central Coast Software** will also be demonstrated in **New Horizons'** booth. **Central Coast Software** recently became a division of **New Horizons**. The **Central Coast Software** product line includes *Quarterback*, a hard disk backup utility, *Quarterback Tools*, a disk optimizer and recovery utility, *DOS-2-DOS*, which transfers MS-DOS and Atari St files to and from AmigaDOS, and *Mac-2-DOS*, which transfers Macintosh files to and from the Amiga.

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YOU OWE IT TO YOUR KIDS

James Cook University

James Cook University of North Queensland will have at their stand at the World of Commodore Show in Sydney the *JCUMetSat, JCU Weather View* and *ZIP. JCUMetSat* system is in use by Prime TV (Canberra & NSW), QTV (Townsville based satellite service QLD), Channel 7 and Channel 9 (Brisbane), and the Australian Navy and Schools.

Soft-Logik

Several new products will be on show including a drawing program, a bitmap editor, a word processing program and an inter-program communication system.

Soft-Logik will feature an exciting new structured drawing program. The drawing program will allow desktop artists the ability to use basic objects like circles and rectangles as well as the more complex Bezier curves. It will also have the ability to save files in EPS and IFF DR2D format for easy importing into programs like *PageStream* or *Professional Page*.

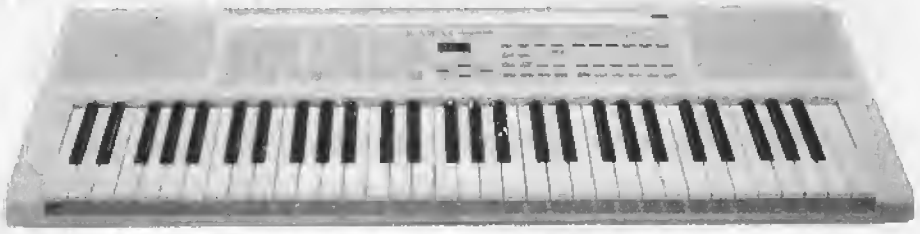
I.C.D.

ICD will be demonstrating a range of their hard drives and controllers including the new *Prima 52i* and *Prima 105i*.

Also on display will be **ICD**'s new "Shuffle Board", a part of the Prima package, reroutes DF0: to the external floppy connector making any Amiga compatible external floppy drive act as a true DF0: device.

Free Spirit

Free Spirit currently publishes over 20 titles for the Amiga and has just recently released its first CDTV title.



See the Kawai Funlab music system at the Hard Disk Cafe

At the World of Commodore/Amiga **Free Spirit** will be premiering a new educational title for children in the 6-8 year old age group. *Adventures in Math* is an Amiga software program to teach young children addition, subtraction and counting skills. *Adventures in Math* utilises colourful graphics, amusing sound effects and entertaining games to teach children in a fun way.

Free Spirit will also be displaying its challenging new arcade/strategy title for the Amiga called *Abyss*. *Abyss* features multi-directional scrolling graphics, fully digitised sound effects and incredibly challenging puzzles.

Hard Disk Cafe

One of the largest stands at the show, be sure to take a stroll down **Hard Disk Cafe**'s gigantic row of displays including a host of smaller people from all over Australia.

Greg Perry from **GP Software** will be demonstrating the latest version of *GP-Term*. He is also the man with the Amiga driver which produces 24-bit graphics on the new *Canon FP-510 Inkjet printer*. Greg, a man of many talents, will also have Amiga NET running and just maybe some examples of touch screens.

Color Computer Systems video products such as the *Videomaster* and *Real-3D* will be on display. **Don Sforcina** from the company will be on the Commodore stand just around the corner.

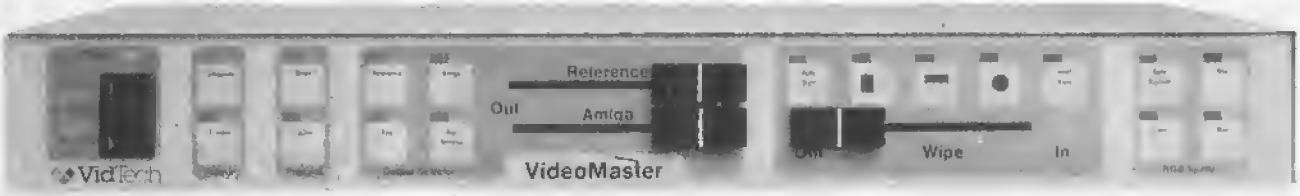
There will be Amiga 3000's on display, and Karen's favourite device, the *Canon Still Video Camera*, will be busy still videoing people all over the place.

Hard Disk also hope to have CDTV Players for sale! There will be a CD with some 450 *Fred Fish Disks*. The *Kawai Funlab* will be on display along with *Sharp Scanners*, the *Kurta Graphics Tablets* with templates for *Deluxe Paint, ProDraw, DynaCad* and *Digipaint*.

Edwin Huang of **Rythmic Bytes** will be there with his high end Roland MIDI gear and some Amiga MIDI software. **RAMSCAN** will be showing off the *Audio Engineer Junior*.

Sybiz *Easyledgers* will be there along with the rest of the Hard Disk team including Karen, Neil, Robert Bailey, Mal Settle, Phil Gaunt. Doug Prager will be doing some DTP and Daren will be playing with *Sculpt*... It will be the stand with an expert for everybody. ❑

world of commodore AMIGA



Vidtech VideoMaster

world of commodore AMIGA

Seminars

July 12, 13 & 14, 1991, Sydney Convention and Exhibition Centre, Darling Harbour

SOMETHING FOR EVERYONE

It might be a cliche, but at the 1991 World of Commodore/Amiga Seminars there really is something for everyone.

Virtually every aspect of the Amiga's quite remarkable repertoire is covered by acknowledged experts in their respective fields. Without exception, these people have chosen the Amiga for one simple reason: It does what they want it to do.

Needless to say, all of these people could have chosen any platform they wished. In fact, many have used other machines, but have now made the Amiga their computer "of choice".

Some of the World of Commodore/Amiga presenters and their topics include:

DESKTOP PUBLISHING - FRANK KEIGHLEY

As convener of an international congress for 700 delegates at the start of the bicentennial year, Frank Keighley used the Amiga. Now, at Desktop Utilities with bureau services and software distribution and publishing, the Amiga provides the platform to get it all done.

The Amiga's desktop publishing capabilities make it possible to do just about everything in-house, including advertisements, software manuals, newsletters and brochures. Frank will introduce desktop publishing on the Amiga, look at what is needed in getting started and show some of the versatility of an Amiga publishing system.

EDUCATION - CAROL WHAN

Carolyn Whan B.Ed. (Art),M.Curr.St. is a secondary teacher in the Visual Arts at Ulladulla High School. She has conducted many inservice and training courses and was deployed to consultancy positions for Art, Craft and Design K-6 & K-12 with Studies Directorate, NSW Department of School Education 1980-1, 1988. Carolyn has presented papers, demonstrations and workshops at regional, state, national and international conferences. She is currently studying for a PhD in multimedia and education at Wollongong University.

CDTV - GAIL WELLINGTON

Both the topic and the presenter are new to Australia. CDTV, or Commodore Dynamic Total Vision, is being launched at The World of Commodore/Amiga. Gail Wellington has been one of the people behind CDTV at Commodore in the USA, just as she was responsible for the launch of the Amiga computer.

CDTV is the first commercial application of multimedia technology, combining the attributes of the video disc with the performance of the Amiga computer.

CDTV is expected to have just as great an impact on home entertainment, education and business as did the video cassette recorder a decade ago.

You will be amongst the first to experience CDTV at The World of Commodore/Amiga.

MUSIC - PHIL RIGGER

Phil Rigger is one of Australia's leading professional computer musicians, and works with many of the "big names" in the music industry. His credentials include "Communication", which was released by John Farnham and Danni'elle. reaching the top ten nationally.

Phil, and his partner Phil Beazley will explain how he uses the Amiga in comtemporary music, including songwriting and production. He will also show how to set up an Amiga-based home music studio, and which software to choose.

Assisting will be one of Australia's leading "fiddlers", Paul "Pixie" Jenkins. He is best known for his backing work for John Williamson.

PROFESSIONAL VIDEO - BRETT SULLIVAN

Ever since Brett Sullivan topped the HSC in Art with his video presentation (the first time it had been done) he has been involved in the professional video business. He writes numerous columns and reviews for magazines and newspapers, and his best-selling "Desktop Video" book has introduced countless thousands of people to computer video presentations.

At only twenty years of age, Brett currently lectures at both the University of NSW and the Australian Film, Television and Radio School, so he is well qualified to present his favourite topic - and his favourite computer - at the World of Commodore/Amiga.

MULTI MEDIA - ANTHONY TEMPLE

Anthony Temple owns and operates a consultancy specialising in "the development and project management of videodisc systems and digitised sound/image based delivery mechanisms."

That rather long description basically describes the fastest-growing computer application of them all - Multi Media. And the computer which is best suited to multi-media is, according to the experts, the Amiga.

Anthony will demonstrate, in an easy to understand way, just why and how the Amiga is so good at multi-media applications, and show you the many uses of multimedia in education, commerce and entertainment.

ANIMATION GRAPHICS - LISA ROBERTS & ANDREW NELSON

About three years ago, Swinburne graduates Andrew Nelson and Lisa Roberts started a small animation company called Anillusion.

Since that time they have become leaders in the art of computer animation, producing films, videos and educational software using the Amiga.

As well as producing their own work, Andrew and Lisa continue to assist others (especially children) in the production of imaginative work.

At World of Commodore/Amiga, Andrew and Lisa will pass on their wealth of experience in computer graphics and animation.

TIME	*ROOM NO.*	*PRESENTER*
10.15 am	1	Frank Keighley (Desktop Publishing)
11.15 am	2	Carol Whan (Education)
12.15 pm	1	Gail Wellington (CD-TV)
1.15 pm	2	Phil Rigger (Music)
2.15 pm	1	Brett Sullivan (Professional Video)
3.15 pm	2	Lisa Roberts, Dr Andrew Nelson (Animation / Graphics)
4.15 pm	1	Anthony Temple (Multi Media)

It's a Miracle! Piano teaching for peanuts

by Eric Holroyd

When the talk gets around to being able to play the piano most adults will admit that they wish they could, usually saying something along the lines of "I wish I'd been given the opportunity to learn piano", or "If only I'd kept up with the lessons and practice."

In my case it was the latter as my father was a piano teacher and started me on it when I'd just turned five years old. He'd been teaching me the English language from four - I could read stories by the time I went to kindergarten - and he started me on music as a "second language" at age five. We started on the theory with a "flash card" system where he'd hold up a card with a note on it which I was first of all to name and state its "time value". Once I'd got used to some of the theory he got me playing scales on the piano and insisted that I do one hour each day at this to get proficient.

From there it was on to simple pieces which got progressively harder the more I got into it. I remember it all as being very boring doing all that repetitive practice with a metronome clicking away to help me learn how to keep time and play rhythmically. I'm afraid I rebelled against it all in my early teens, forsaking piano for playing cornet in a brass band with my mates. Since then I've learned other instruments such as guitar and trombone, but I couldn't have done any of that without all the early groundwork on piano.

If only my Dad had had the "Miracle" teaching system he wouldn't have found having me as a pupil such a trial! This system really does take much of the drudgery out of learning piano and in fact turns it into a fun experience for the pupil.

See the Launch

Mindscape are launching the "Miracle" at the World of Commodore Amiga Show which will be at Sydney's Darling Harbor Convention Centre on July 12, 13 and 14. I had the opportunity to visit their Castle Hill office to check it all out prior to the exhibition and it didn't take me long at all to see the immense potential value to both students and teachers.

The heart of the system is the Miracle keyboard, which connects to your Amiga by a cable. It has four octaves (49 notes) of full size keys (that's very important!) and - unlike many of the low end electronic keyboards around - they're velocity sensitive too. This is just like on a real piano where the harder you strike the keys the louder the note. That works in reverse too: you can play softer by pressing the keys down more gently. In addition, the keyboard comes with a sustain pedal which works just like the right hand pedal on a normal piano, so that the student is really working on a proper instrument right from the word "go".

Stereo speakers are internally fitted to the Miracle keyboard and it produces a very nice and extremely real piano sound through them. It would probably sound even better if connected to an external amplifier too. In fact my own Amiga has been hooked up to a large ghetto blaster ever since I got it and the sound is great!

Inside

Many other digitized sounds and effects are built into the unit besides the piano sound, over 100 in fact, including Organ, Harpsichord, Vibraphone, Guitar and Synthesizer. There's full MIDI support too (8 channels multi timbral and 16 note polyphonic) via a built-in MIDI interface fitted with standard IN & OUT sockets.

The keyboard can also be "split", or divided into two areas using different sounds so that the right hand can be

playing Saxophone sounds for example, and the left hand Electric Piano or whatever.

To complete these impressive keyboard specifications there's a power adaptor supplied so you don't need batteries, plus a headphone socket so that the student can practise any time, day or night, without disturbing anyone else in the house. The keyboard may be used as a "stand alone" instrument if ever the student (or Mum & Dad!) want to play it outside of the Miracle program.

Teaching Program

The actual software teaching program has been very well thought out and I was most impressed with the way the student is led through the extremely important early stages of learning. The excellent screen display shows the piano keyboard at the bottom, below the displayed music, and whenever the student plays a note the corresponding key depresses on the screen, which I consider to be a great help in learning. At the same time, the correct "fingering" to use for playing each note is shown, "1" for the thumb through to "5" for the little finger and the note names are shown on screen too.

The absolute beginner starts with simple exercises for the right hand only, being led through the routine by the computer first of all. Left hand exercises are added gradually. After each exercise the student is "tested" (in such a nice and easy manner that it doesn't feel like a test) to see that the message has sunk in.

If it hasn't - and I tried this out with some deliberate mistakes - the program won't let you go any further until you've done the simple test again properly. Twice! This really reinforces the learning and in many ways it seemed to me to be better than a human teacher as it was quite pleasant about making me do it again and didn't lose its temper with me at all!

The things I mentioned above from my beginner days - flash cards, metronome, scale drill, theory etc - are all used by Miracle with great effect and there's a lot more too. For instance, there's a video game called *Alien* which teaches proper fingering technique by means of a shoot 'em up technique.

Another one called *Shooting Gallery* teaches note recognition by having sitting ducks gliding across the screen on the lines and spaces of the musical stave and you have to shoot them by pressing the appropriate note key. Several other games teach Chords and Rhythm etc and it's all made very interesting for the student - and so much more painless than the old fashioned "learn by rote" methods.

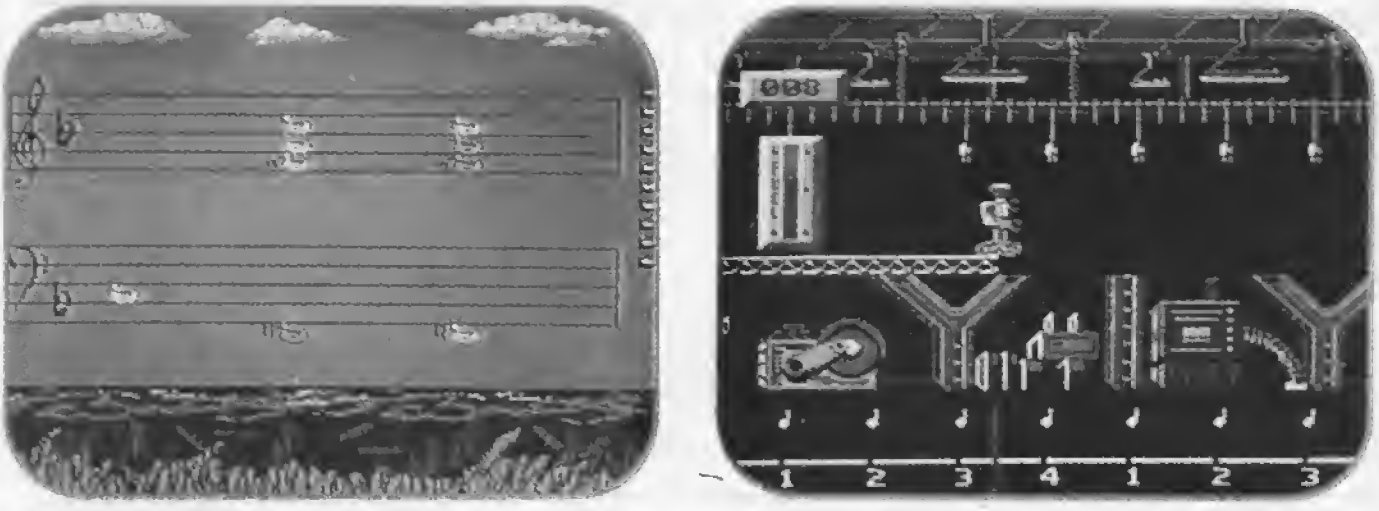
As the program demonstrates the lesson before having the student play, it's quite easy to make quite speedy progress, in fact it's not very long at all before the beginning student is playing real songs. This is done from actual musical notation displayed on the screen together with the correct fingering. Playing actual songs rather than mere exercises is always a thrill for the learner and even more so with Miracle as you get full orchestral accompaniment as a bonus once you've learned to play the tune by yourself.

As a matter of fact I got quite a buzz from this when working through the various levels of proficiency to check it out for this article. I selected a tune from the menu of well over a hundred songs - classical, rock, standards, show tunes etc - which is a particular favorite of mine. Known to all Australians as the "B & D Roller Door Song" it's really Bizet's "Carmen" and I played it firstly as a solo direct from the on-screen music, then again with full accompaniment by the orchestra. It sounded great and had people from all over the Mindscape offices putting their heads round the door to see who was the Maestro!

Everyone likes to have their achievements recognized and school teachers everywhere have long used the system of giving rubber stamps to kindergarten pupils for good work and certificates to older pupils.

The Miracle system does all this too by automatically tracking the progress of a student then printing a certificate on request. Highly motivating stuff!

Miracle is available for Amiga and Commodore Colt (which means of course IBM compatibles) and has 250 lessons ranging from Beginner to Advanced. The software is menu driven and mouse operated for convenience and the screen displays are nice and crisp. A Music Record feature lets you preserve your best efforts and you can even get the pro-



Fun with games teaches note recognition and fingering technique

gram to help you learn to play your own favourite songs.

Conclusions

All in all I think this is a terrific idea. It's certainly unique in the home computer field as far as I can see, being a hardware and software combination to actually teach a subject. I know there's a lot of very good music software currently available, but that's mostly for people who already know music.

I believe the Miracle package to be good value as many comparable keyboards on the market cost the same or more without the benefit of the excellent software. I also believe that it will help many, many people - both young and mature - to play the piano and therefore gain a much higher appreciation of music in general. From a purely mercenary point of view it must be good value too when stacked up against a human teacher charging from $20 to $30 per weekly lesson.

I looked at it hard and long, working through many of the exercises, drills and features and the only thing that I could find fault with in the whole deal was the use of the word "pinky" to describe the little finger! There wasn't anything else I didn't like. Hardly a major problem, eh?

Whilst I was at the Mindscape offices doing all of this I saw some of the American TV footage showing the Miracle system and also learned that Dudley Moore had featured in the USA advertising promotions. He'd apparently worked through the system and its software, satisfying himself that it was a "valid and proper" piano teaching aid before agreeing to endorse the product as he's a much respected musician - a graduate of the prestigious London College of Music in fact - as well as being a very funny comedy actor.

To finish up, I can only say that I heartily agree with Dudley Moore and have no hesitation in adding my own recommendation.

THE Miracle System - RRP $699.

For more information call Mindscape on (02)899-2277.

Optional accessories: Folding steel keyboard stand, steel bench with padded seat, padded nylon carry case with zippered accessory pouches. Prices on these items unavailable at press time. ❑

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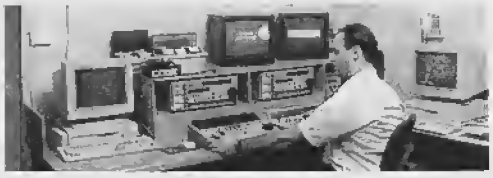

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Now I feel like a real MUGICIAN

by Alex Van Starrex

Could *Mugician* kick *Soundtracker* and *MED* for a long rest, or will the old favourites keep the beat?

Amiga muso's are spoiled. Apart from a wide selection of commercial music programs to choose from, for the price of a single disk from any major public domain distributor, we can take our pick from any of an equally-diverse range of PD music-programs. These includes names like *SoundTracker, NoiseTracker, Games Music Creator, Oktalyser* and my personal favourite, *MED* (now in its vastly-improved version 3.00).

Unlike their commercial alternatives, these programs all use a method of producing songs by creating and linking "sequences" of notes - a method which has its disadvantages.

Mugician is a new commercial program which combines the sequencing-mode of the popular PD programs with highly-sophisticated sound-creation features that are simply unavailable elsewhere. It's being touted as "the professional digital music utility that's easy to use - by Softeyes" and "Created by professional programmers Softeyes to aid their game designs". I mention all this because it does take some time to figure out exactly why *Mugician* was developed and where it fits into the current Amiga music scene.

The program is intended for use by game programmers who require music in their games but don't wish to "hard-code" it. Instead, they can use certain machine-code routines to play the music which they have created with this package. It is a specialist-tool, and one with only limited appeal to other Amiga-musicians. In keeping with this idea, I'd recommend it to games and "demo" programmers who demand sophisticated sound-manipulation facilities.

Copy Protection

Mugician was programmed by the European team "Softeyes" and is currently being marketed by Thalamus. This "two-fold" development seems apparent from certain anomalies which are present in the package, with respect to the copy-protection and its effect on the program's performance. *Mugician* won't operate from Workbench and it doesn't multitask - so I presume hard-disk installation is out of the question; this leaves the question of backing-up your disks, in case of any accidental damage.

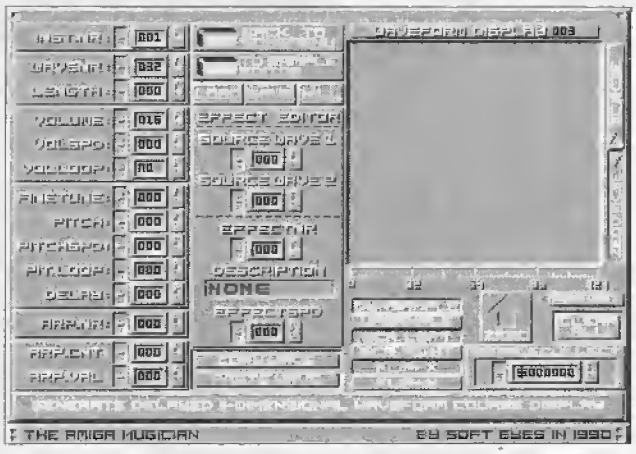
Thalamus have employed some highly-sophisticated copy-protection for *Mugician* - even though this is a AmigaDOS disk, the program itself is completely "invisible" to both conventional file-readers and the measuring-gadget on the left of Workbench-windows!

Although the manual warns that you could damage the main disk while trying to copy it, I tried it anyway, using several types of disk-copying programs, but couldn't load anything from the copy other than the "megademo-style" opening - graphics, music and scrolling-message. To add insult to injury, the program features a password-code system once you're inside, in order to get any further - I suspect that this was the only protection which appeared on the "original" product.

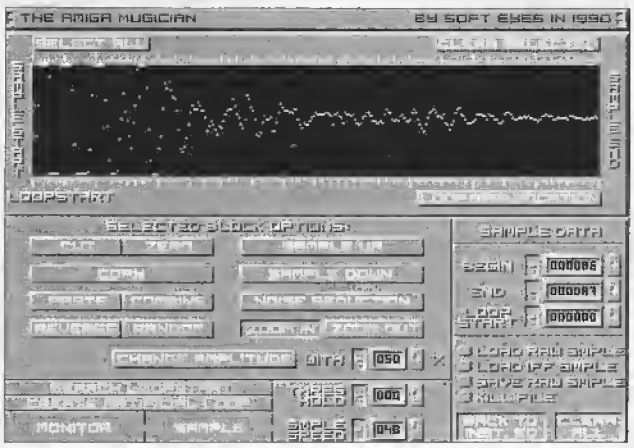
Operation

There are four main screens in *Mugician:* the Instrument Editor, the Sample Editor (which can't be accessed if your current "instrument" is not a sample), the Pattern Editor and the Song Editor. The screens are impressive to look at but excessively cluttered, the programmers having forsaken a simple pictorial display of much information in favour of uninformative "digital" readouts. In keeping with this bothersome type of system, to move from, say pattern #1 to pattern #65, you'd have to press the mouse button inside the appropriate "+" gadget 64 times. There are no keyboard-shortcuts - the keyboard being only used

Continued on p25



Instrument Editor



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Below are just a few titles that we have been holding up to the sun awaiting the bewitching time . . . when we actually have a CDTV player to use them on!

Well, by the time this issue hits the newsstands, we should have some in the shop (and one in my bedroom) for a sneak preview, (anticipating early July) prior to "THE SHOW".

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NEWS 'N' STUFF

Don't forget to get your entries in for the Professional Amiga User magazine's Graphic Competition. (Details in mag.) Among the prizes drawn at the World of Commodore Show is a Canon Ion Still Video Camera presented by The Hard Disk Cafe.

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Be there to find out what other Goodies are in store!

for entering and deleting notes.

I managed to find my way around a major "bug" in the program, which results in the disk-drive spinning endlessly until you try loading anything from disk - at which point the whole program crashes. You have to do the following: 1. Select "Go to Patedit (Pattern Editor)" from the main (Song Editor) screen; 2. Select "Load Pattern" from the Pattern Editor screen; - click "df0:" from the file loading/saving/deleting tool.

Absolutely nothing else but the above system works - I crashed the program around fifty times in trying out other ways to beat the problem. However, once you do the above, not only will the hitherto incessant drive-spinning cease, but the program will now recognise other disks (e.g. the song disk) which are loaded into df0. For some inexcusable reason, *Mugician* doesn't recognise any other drives - df1: or otherwise (too bad if you keep all your samples on hard disk). Be warned, however, that the program still crashes occasionally, when loading songs (and, I presume, files generally).

A demonstration tune automatically loads with the program: unfortunately it doesn't have a name and can't be reloaded without re-booting the disk! You can load the (suspiciously short) songs from the second disk once you get around the "bug", but little else - apart from from samples and whatever you happen to save in the way of *Mugician* instruments, patterns or songs. Despite being a sequencer-style program, the patterns and songs aren't compatible with either *SoundTracker* or any of its clones.

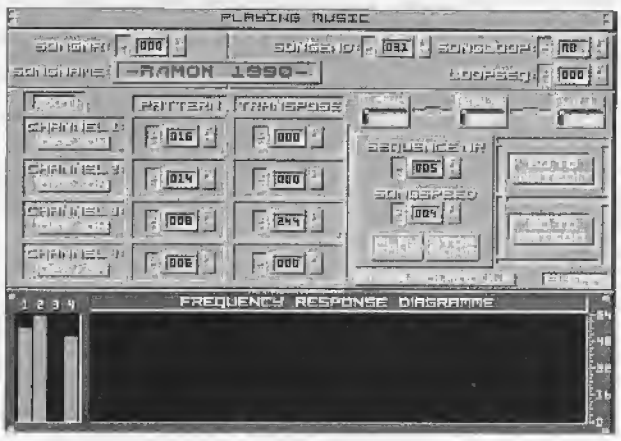
The problem of incompatibility goes further than that, as Thalamus haven't included a player-program with *Mugician* - only a machine-code routine that requires an assembler (and more machine-code) to play a song without the main program. Unless users of this program are programmers themselves (or have others to do the programming for them), they may as well be composing songs in their heads - no-one else will effectively be able to hear them.

Power

But if you're in the business of designing games (remember the packaging, after all) *Mugician* offers some very serious "musical-muscles" for your dollars. Aside from the question of the superior sound possibilities of its user-definable instruments, there are further code-examples in the manual to show how up to eight songs (all using the same instruments) can be activated and manipulated within a main program. This would allow for quite an extensive musical soundtrack within any game.

The sound creation features of *Mugician* lift it head-and-shoulders above all other music programs, at least for the moment (some public domain programs such as *MED* v.3.00 are already starting to feature similar features in a much less sophisticated way).

Apart from being able to create and modify samples, *Mugician* allows the creation of instruments by using or combining any of a range of 32 basic waveforms; add a further 15 possible effects - including filtering, mixing and even "morphing", and the possibilities for new (if not all pleasant) sounds becomes almost endless. This goes a long way towards solving the inherent limitations of using samples in compositions - duration, invariable sound, poor sound quality and the inevitable "speeding-up and slowing-down" according to pitch.



Song Editor

There are also sophisticated graphic displays to show how sound is being generated and affected by the implementation of various effects - including a "3-dimensional" graph, whose display is similar to that of the old "Fairlight" computer. And, as something of an aside, *Mugician* is the only program I know of which allows the user to play non-MIDI sounds (including IFF samples) polyphonically on their Amiga keyboard.

It's a shame that other programs don't offer this at least as an option - though it gets in the way of hearing how sequences will ultimately sound. It's even more of a shame that no music-program allows the entry of polyphonic notes directly into the score, as this allows aspects of "real performance" to creep into what is otherwise "machine-like" music.

Song production

Any potential users of this program must be able to come to terms with its somewhat unique method of song production. *Mugician* songs are built-up from individual sequences - not "blocks" (i.e. groups of four sequences), thereby saving space for any patterns, such as drumlines, that may repeat extensively throughout the song. There is a down-side to this, however, which results in what is, to my mind, the single greatest fault with the whole package.

Only one single track (of 64 notes) can be worked on a time - this must be created (or loaded), viewed and heard in isolation from the rest of the song - the usual onscreen scrolling of entire songs, as is available in many other sequencer-based packages, is absent. Not only that, but the playing of notes from the keyboard is de-activated while (partial) songs are being played. In effect, this means that patterns and songs in *Mugician* must be assembled by sheer guesswork - or else from a written plan.

As all instruments and patterns have only numbers to identify them, the need for copious written notes at all stages of song construction becomes evident. Instead of using, say, 20 blocks of sequenced notes in conventional sequencer-format, up to 80 separate patterns would have to be assembled. Patterns can't be copied (as there is no copy-buffer) - they have to be saved separately, then re-loaded and modified.

Whilst it is possible to actually construct songs by this method, it is extremely time-consuming and the possibility for errors and miscalculations becomes enormous. Add to this the dubious disk-loading facilities and you get a

Continued on p28

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situation where many users would simply not even bother to create any music with the program, preferring instead to fiddle around with the 4-note polyphony of the keyboard or the often just gimmicky sound effects.

Graphical display of the song currently playing (other than numbers for the song and pattern numbers, etc.) is poor. In addition to the standard bargraph type volume display, there is a larger display which, for some reason, is at least two-thirds empty all the time (maybe this is another "bug"). Scrolling messages, displaying the status of the program ("Playing Music", etc.) appear in the top of the screen, according to what function you have selected; though some are misleading (such as the "All Songs Cleared" message when you load a new song), while one which says "Hands Off Dumbo" may, in combination with the various other frustrations of the program, find users contemplating treatment to the program disk of a type that they wouldn't ordinarily resort to.

MIDI

There is minimal support for MIDI, though a provision exists for using the Amiga as a "tone module", which can run any MIDI keyboard or MIDI instrument with a built-in sequencer. Whether such facilities genuinely add to the appeal of *Mugician* is questionable - there are still the limitations of the song- construction process to taken into account.

Conclusions

As I stated at the beginning of the review, this is a program for games or demo programmers who are looking for "something extra" to create their scores with - but even they would be hard-pressed to put up with *Mugician's* song-creation restrictions. That, and the lack of a player program or compatibility with other song formats, makes the program one of limited use to other people. Whilst the program does set new standards in the quality of its instruments, I doubt whether it will be too long before other programmers - especially those responsible for the better public domain programs - manage to catch up with it. In the meantime, it'll be a case of "nice sounds, but shame about the rest of the program". Distributed by Pactronics (02) 748 4700. ❑

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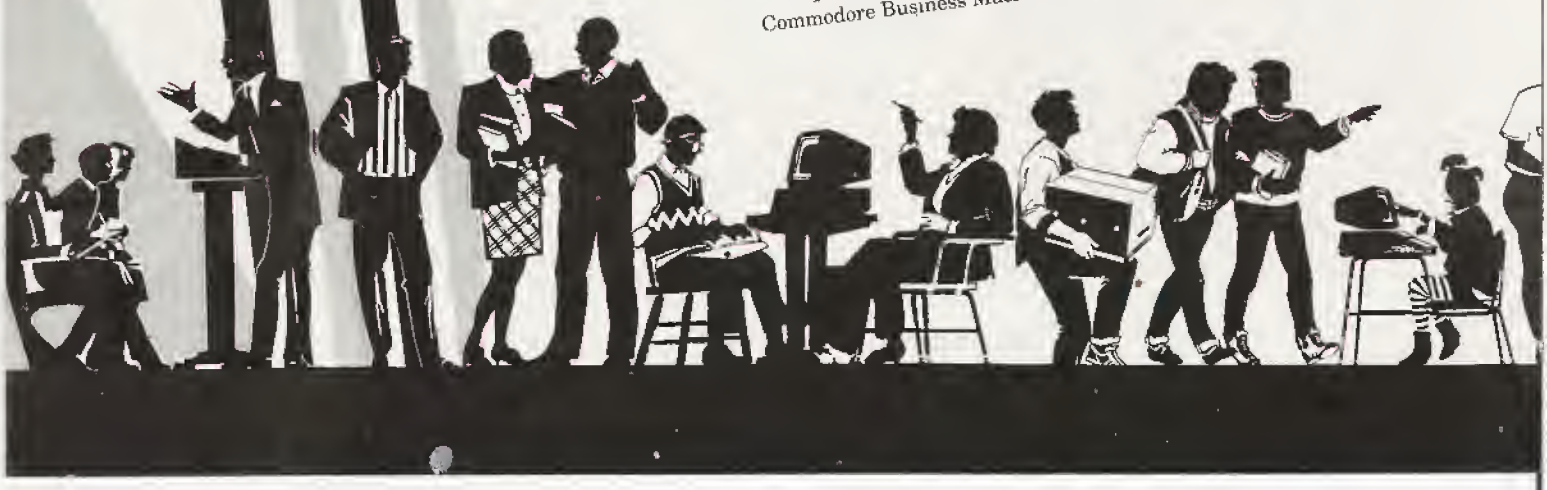


Graphic Atlases by Mouse

If you're looking to map out a clear view of Australia, or even the world for that matter, there are two offerings available right now which will help you mouse your way across the countryside. *George Kimpton* examines these programs in detail.

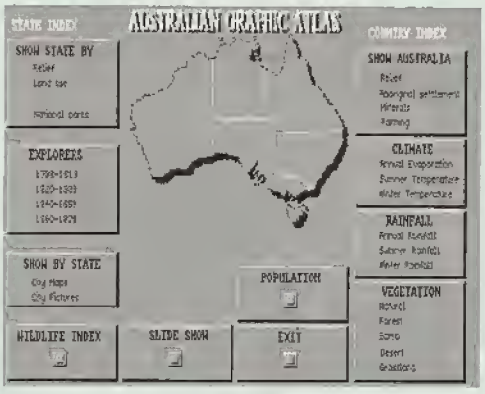
Maps, whether they be a street directory or an atlas, we cannot get far without them. They are an important part of our lives. Without maps or atlases to show us where the places are that we hear of, or are learning about, we would have a very distorted idea of the world around us to say nothing about getting just plain lost.

In my younger years (a long time ago unfortunately) atlases were little more than just coloured maps with lots of names all over them and at school, Geography was a boring subject, just like those maps. Today atlases are more often than not quite interesting and somewhat like encyclopedias, filled with pictures and detailed information about the countries concerned. They have become part of the information explosion of modern times.

Thus I suppose it was inevitable that computers would somehow get in on this act with their ability to store and access massive amounts of data quickly, so let's look at two of the latest offerings, *Australian Graphic Atlas* and the *Centaur World Atlas*.

Australian Graphic Atlas

Let's start close to home with the *Australian Graphic Atlas* or AGA as it is referred to in the manual. Currently this is the first in a planned home grown series covering the South Pacific Region and promises much for the future. The current version covers only Australia.



System requirements are for at least 1 Meg of memory and two disk drives but extra memory and a hard drive will make operation quicker and easier particularly for initial loading. My own experience is that using a hard drive reduces start-up loading time from 6 minutes to 45 seconds and the whole thing just flies from then on.

AGA comes with a thin manual, 14 pages in fact, which surprisingly is adequate, and three disks consisting of an *Amigavision* file plus lots of really great graphs, pics and maps. All maps or pics are in IFF format and so can be used for or in other projects.

It is mandatory that you have *Amigavision* to run this atlas as the control file is in the *Amigavision* format. In a way this is good as it allows you to modify, change or add to the display format to suit your own requirements. There are a few minor things that could do with some visual changes to give a more acceptable presentation in some segments.

The presentation is generally very good though and carefully thought out with information quickly and easily available with a mouse. It's just point and click and there's the required information as quick as a wink, just the thing for schools.

Maps provide information on explorers routes, climate, rainfall, vegetation types, wildlife and habitats, population statistics, aboriginal settlements, minerals, farming and other land uses, National Parks, relief maps and maps and or pictures of our capital cities.

Individual maps or information slides are directly accessible by mouse or it is possible to run a slide show on a specific subject such as the Explorers where each slide is shown in succession.

At this point I must offer comment on two minor flaws in the presentation. The use of a chunky dissolve between slides can be very confusing especially if, as is the case, the dwell period for each slide is too short to absorb much information.

There is no problem when looking at individual slides, just in the slide show format. This is easily corrected by the user because of the Amigavision format.

Just open *Amigavision*, load the AGA.Avf file and adjust the transitions and dwell times to suit.

In fact, if it does not contravene copyright laws, the whole show could be rearranged to suit individual needs. Digitised pictures and other art work could be added with the sky or memory/disk capacity as the limit. Animations could even be added to make a point. (I suspect this flexibility is what the developers had in mind from their comments in the manual.)

There is certainly a mass of information for schools or projects and the good part is that the maps etc. are in IFF format and therefore usable in paint programs or desktop publishing etc.. They are available for a stand alone presentation or a reference for projects or demonstrations.

One point for those who purchase this program and intend putting it on a hard disk, as I would recommend, the manual refers to an installation procedure in the *Amigavision* manual.

Search as I might I could not find it. Instead I copied the AGA ikon into the

Amigavision drawer then created directories for disks 1,2, & 3. The ILBM and ANIM files were then copied to the appropriate directory and the appropriate ASSIGNs made in the startup sequence and it worked like a charm.

Definitely a must for schools. Let's hope the developers continue the good work with further releases and additional slides. If they care to get in touch with me I have a few thoughts on minor changes to make a great program slightly better.

Centaur World Atlas

Nice package and jazzy intro but a misleading cover. This program does provide a map of the selected country plus a lot of other information but it does not give the detailed map shown on the cover. It does not label islands, rivers or cities as shown.

No system requirements are given in the manual but a loose sheet suggests a minimum of 200k chip RAM. Learning the hard way, I also found that even two floppy drives are not enough. This program, unless installed on the hard drive, will try the patience very quickly with disk swapping and there are four disks supplied with up to three being used at any one time.

The manual, like that of the *Australian Graphic Atlas*, is very brief and to the point but unfortunately useless when it comes to hard disk installation. Contrary to the manual's instructions there is no information on booting up with the program disk about the HD installation. There are other small discrepancies in the manual which may cause some problems but can be worked around.

Using *Diskmaster* it is possible to find out there is a file on the program disk called "HD_Install". Using CLI or Shell it is possible to activate this file and start installation. Twentyfive minutes later it is installed and ready to go. Access is easy and reasonably quick after this and certainly not the pain in the neck that occurs using floppies.

After all this I discovered an overview sheet tucked away in the box which told me how to carry out the installation on the hard disk from CLI. This sheet also admits that there are still some bugs which will crash the program.

On start up you are asked to select your home country, or state if in the USA, and set the time. If you have a clock normally running the time is automatically set, but selecting anything but a state in the USA, when working with floppies, left me with a blank screen unless I installed it on my hard disk which I did eventually.

Again the manual refers to an "OK" button which does not exist. Luckily the return key or the mouse button suffices. Actually operation can be a mix of mouse and hotkeys. Sometimes the mouse is allowed to work, other times not, especially on hard disk.

Strange things happened to me on hard disk, the click point for the mouse seemed to move to the left and some control buttons didn't work all the time. My accelerator also speeded up scroll selections making it difficult to select the required item but with perseverance all was revealed.

After the preliminaries you choose from a world version or USA version atlas or some basic info on the Earth itself.

Continued on p36

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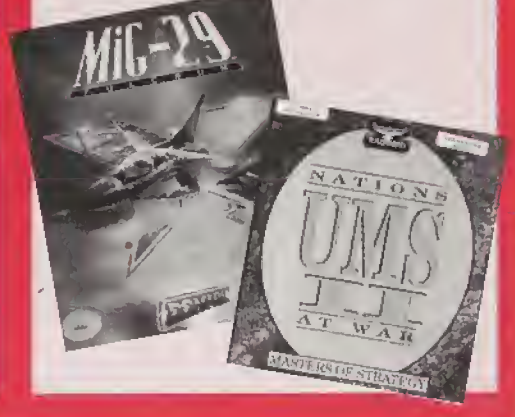


Selecting USA version allows access only to the states of the USA.

Info produces some gems like: The earth weighs 6 sextillion, 588 quintillion short tons. Other facts include the chemical composition, percentages of land, water and ice, time zones, continent population and percentage of earth's surface and other trivia.

Selecting world version brings up another menu allowing you to select maps of particular countries via four paths.

Countries can be accessed by pointing to a zone on the map or selecting from a comprehensive list of 170 countries according to the manual. Scrolling through the long list can be avoided by typing the first letter and then searching that part of the list.

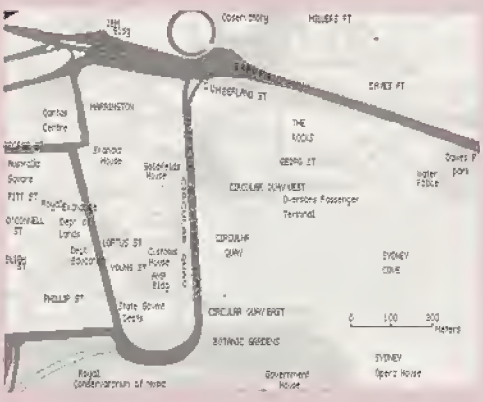
The zone maps display the name of a country being pointed to and give colour coded information regarding land types and usage through the help key. Unfortunately this latter info is not superimposed but on a second screen which disappears when you look at the map again.

Selection can also be through a seek or search function whereby you enter criteria such as Capital City name. Population size, Area of country or even Language. It is also possible to track down countries through organisations such A.S.E.A.N or the Warsaw Pact.

The selection process is versatile and good, disk swapping aside. When the selected country map appears there are two scrolling windows of information plus the official flag and local time.

The map is a bare bones outline only but the scrolled info is fairly comprehensive. The main or vertical scroll is button controlled and gives brief statistical data. The horizontal scroll provides general information at a slow gallop. Speed reading would be a help here. Again it may be my accelerator causing problems here. All data is capable of being edited and thus brought up to date later as required.

None of the maps or data is capable of being printed out for projects except by third party programs that grab the screen and print out or store it to disk. I think this would only be possible on hard disk as floppy operation requires booting up on the program disk.



Conclusions

Both programs have their uses but really need to be installed on hard disk for ease and speed of access. Quite frankly I was not impressed by the World Atlas because of the lack of detail on the actual country maps and the skimpy information, but then what can you expect for 170 countries and 255 maps on only four disks. More info would mean more disks to swap, heaven forbid.

On the other hand the *Australian Graphic Atlas* has terrific maps and plenty of information but only of Australia. Let's hope the proposed future modules are as good as this one.

The future

Both of these programs fill, in part, a gap that exists in data for schools and other inquisitive souls. As I said, the disk swapping can be a real pain and will only get worse if the data is filled out to that which is really desirable.

To achieve this, it is not sufficient to produce reams of text alone in data storage, visual images are very necessary if we are to truly "see" what we are reading about. After all they say a picture is worth a thousand words. This same problem will apply to many other areas of knowledge in computer databases.

This brings us to CD storage devices that our editor, Andrew Farrell, sees as the obvious path for interactive access to retrievable data both written and pictorial such as these two programs. After running both of them I couldn't agree more.

Using programs such as *Amigavision* or *CanDo* etc. and the new Commodore CD ROM, expanded versions of programs such as the two reviewed above will open the world to inquisitive minds. The *Australian Graphic Atlas* in particular is just made for such an application. Using touch screens or developing the mouse control it could become a virtual encyclopedia in written information and pictorial illustrations at your finger tips.

The CD players have the capability to store vast quantities of visual data and even short video segments or animations to demonstrate a particular subject. With the interactive capability of the Amiga and say a touch screen display, the sky really could be the limit in information accessibility.

Australian Graphic Atlas
Distributed by:
H. C. Software
(08) 344 6897
RRP Amiga $69.95 - Version 3 will be at the Show - on the Commodore stand.

Centaur World Atlas
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ComputerMate
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Gold Disk's *All in One*

Get your home computing off to a quick start with Gold Disk's *All-In-One*. But does it really have everything, or is this just another cheap bundle of old products? *Eric Holroyd* put his all into this one review.

There are seven programs on this three disk package from Gold Disk, four of them are productivity software and the other three are games. The productivity titles include *Write*, *Spell*, *Paint*, and *Music* and are all on the first two disks. All run from Workbench so you first of all need to have that running, then put the appropriate *All in One* disk in the drive (two drive users once again come out way ahead here) and from then on it's all done with the mouse by pointing and clicking of icons.

The three games are on the last disk and include: *Silhouette*, which is a brain teasing pattern matching puzzle that also doubles as a sort of psychological test. *Intrigue*, a nice little solitaire strategy game that I found myself coming back to time after time - I'm a sucker for this type of game and this one certainly got me in. *Bouncer-Shaker*, an arcade game under joystick control where you place blocks on which to bounce around in order to escape the clutches of the Red Dragon and his minions.

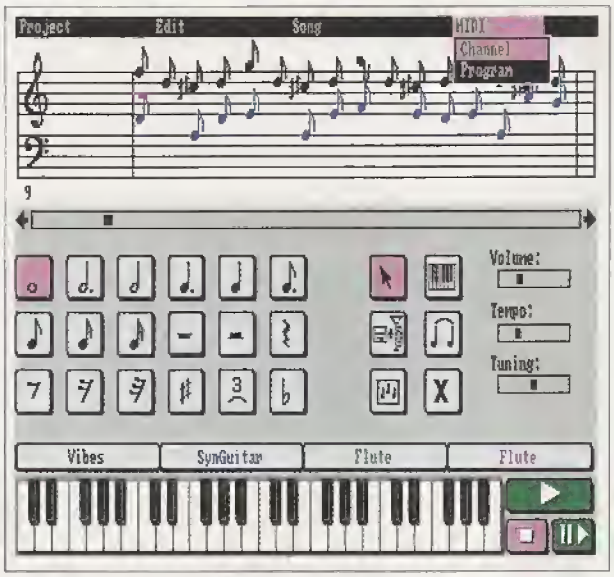
They're nice enough little games which would come in handy if you were just setting up your Amiga system and had no games for light relief from the business stuff as yet. I don't think for a minute that they'd stand up against full-on commercial games but I don't think they're really meant to do that.

Write

I ran *Write* first of all and it turns out to be a nicely updated version of *Transcript*, the Gold Disk text editor and word processor which we first saw well over a year ago here. It now has drop down menus from which to select the various options and there are keyboard equivalents of all the menu commands too. I really like this in a program as I seem to develop my own work methods after a little while of using partly keyboard commands and partly pull-down menu commands.

I found it to be a perfectly adequate word processor which performs all the popular functions such as italicize, boldface and underline text, and the block manipulation functions are all quick and easy to use. When cutting and pasting a block of text, the icon turns into scissors for cutting and a paint roller for pasting so you can't mistake which mode you're in.

Printing of text is done via your WorkBench Preferences so if you have the correct printer driver nominated there all you need to do is click onto the Print tool and follow the prompts that come up in the requester. Text may be sent straight to the printer or you can have a screen preview first and there are options for Left and Right pages, number of copies, which pages to print, single or double spacing etc.

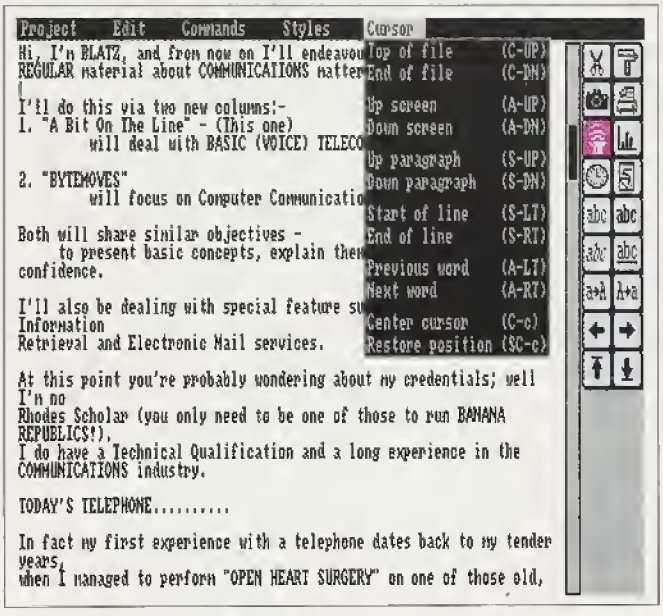


***Music:* MIDI support**

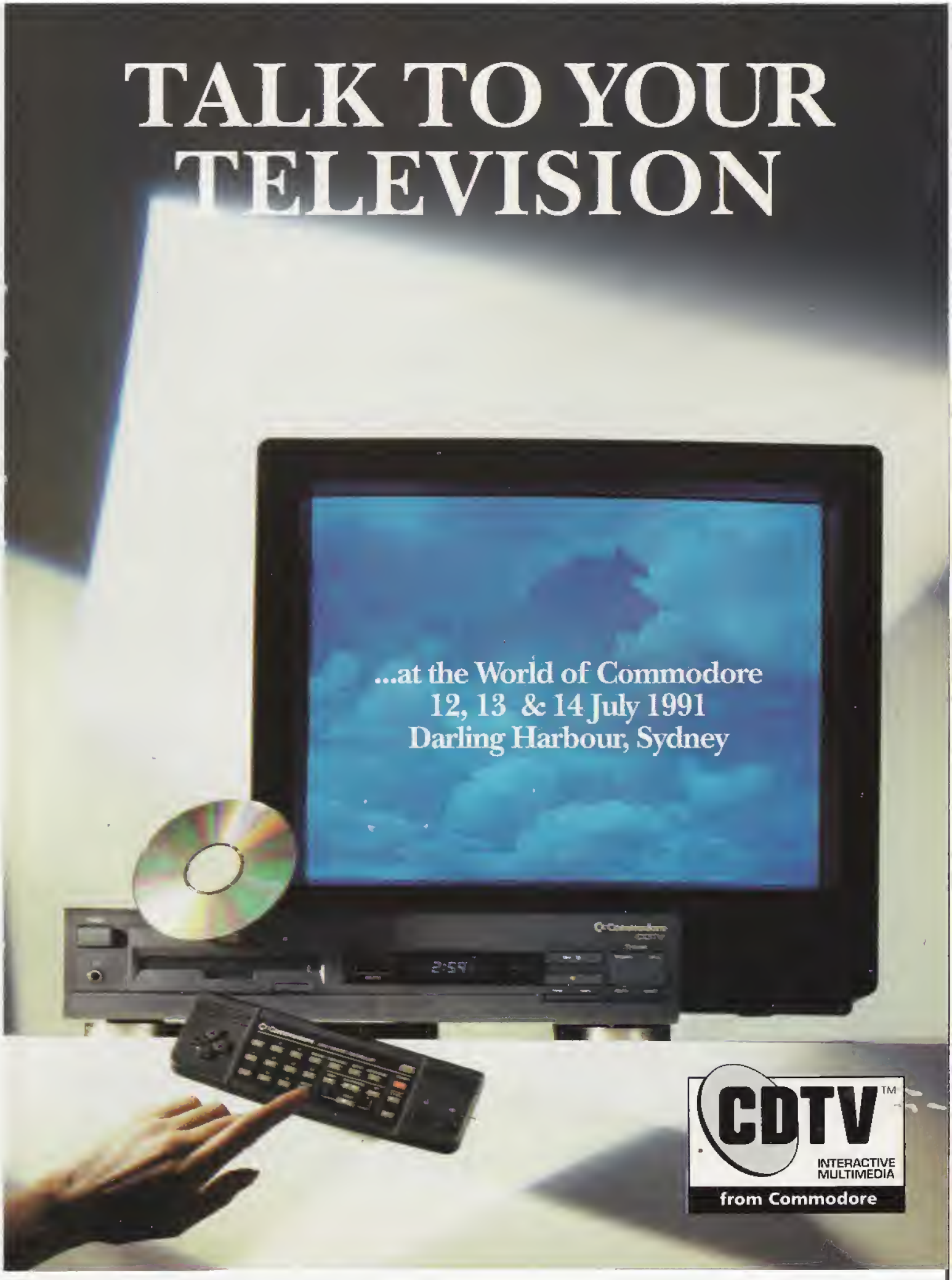
Moving around the screen is easy too, just point and click on the arrow icons to go to the Start or the End of your piece, same for the beginning and end of a particular line (or series of lines).

Write works on the highlighting system, where the mouse is used to highlight text for cutting, copying, pasting etc with the added bonus that highlighted text may be styled, justified or case changed. Very useful if you want a particular section to stand out.

Find and replace works well and I always find this feature useful if I want to change something that I've used throughout a particular piece which I'd like to say differently given the chance. A good example with this article is that I've used the word 'start' two or three times already and if I wished I could very easily get the program to take that word out and substitute 'beginning' in-



Write:* an updated version of *Transcript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from Commodore

stead.

Once I've got everything the way I want it I can have the Spell Checker look it over before I send it to the printer. As *Spell* is a separate program it may be operated independently of *Write* to spell check documents already created. If you have enough memory you can have them both running at the same time and select *Spell* from the drop down project menu. The user dictionary "learns" any words it doesn't already know if you click "accept and remember". This is a very useful feature as almost every profession and hobby has its own jargon with words in use that normal dictionaries wouldn't know.

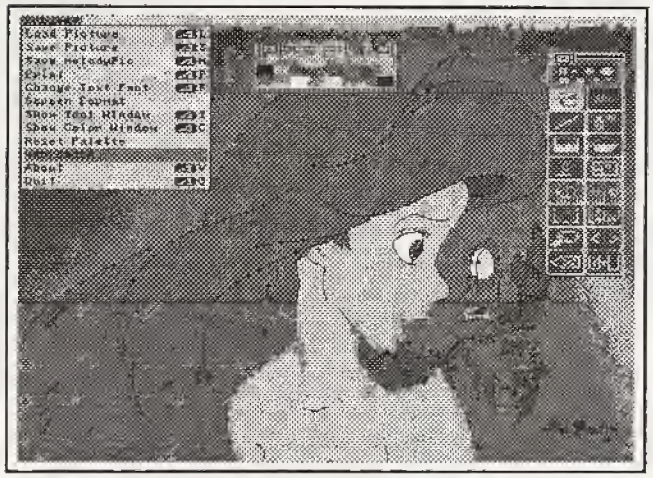
There are some quite advanced features in *Write* such as the availability of special characters such as "accents" as per those in the French and German language. The German "umlaut" (the two dots over a vowel) is produced by ALT/H whilst the French "circumflex" (the inverted V over a vowel) is produced by ALT/K. There are others and you'd need to check that your printer can reproduce them - as just because you have software that'll do it on screen it doesn't follow that your hardware can print it.

Embedded codes, ie codes that are visible on screen but which are not printed on paper, are used to set all manner of things such as top and Bottom & Left and Right Margins, Text Length, Line Spacing, and a host of other bits and pieces. Shift/Alt/S is used to put the special code symbol on screen and the instruction follows it. For instance Shift/Alt/S followed by lm10 would give a left margin of ten spaces and, as I said somewhere above, you may even specify left and right-side pages just as in a printed book. As page numbering is available from the program too you can set odd and even page numbers also.

There's quite a bit more in *Write* and I can best sum it up by saying that it's a good word processor which is easy to learn and run, it has plenty of features, and it may be all that a lot of Amiga users could ever need in a word processor - and then some.

Paint

The "Paint" program takes advantage of the Amiga's ability to create fantastic graphics and has a nice user interface which makes it easy for even the first time user to handle. Again, ev-



Paint: functional, but lacks "power" features

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erything is operated by pointing at icons and clicking the mouse button and, as is usual with Drawing & Painting software, there's a range of Boxes, Circles, Lines and Text tools to use. An area of a picture may be picked up and used as a "Brush" which can be saved for later reuse. Brushes may be Flipped, Re-Sized, Rotated etc and there's a Magnify tool for close up work. Pictures may be created using any 16 of the Amiga's 4096 colors and there's a Color Palette where you may mix exactly the shade you want.

I found it quite a nice program to work with, but obviously compared it with *Deluxe Paint III* which has some really fantastic features, and of course is more expensive - so it's horses for courses anyway. *Paint* came out of the comparison not too badly really, but I'd have to say that whilst it's a good workable painting program and easy to use, it lacks some of the high end features found in dedicated paint programs.

For all that I was able to create some satisfying artwork and used a feature that I haven't seen in any other paint programs to save my creation as a "Melodypic". This means that you nominate the title of a piece of music (obviously it needs to be on the same disk) which you'd like to have playing whilst your picture is displayed on screen. Then, simply by double clicking the picture's icon from the WorkBench screen it will load and display whilst playing your chosen music at the same time. Pretty good eh? That one could be quite useful for showing an advertising screen in a store with an appropriate tune playing behind it.

The tune can be one you've created yourself with the *Music* program or it can be an SMUS file such as those created by programs such as *Sonix*. There are Instruments already on the disk but don't forget to file copy any other instruments over from the disk from which you copy the SMUS music file. Either that or put your Melodypic file onto the other SMUS disk. None of this file copying etc presents any problem as all of the *All In One* software is non copy protected, and you're strongly advised to make backups of the disks and put the masters away for safe keeping. Then of course you do all your work and file swapping on the backups and nothing can possibly go wrong ...

Music

Music displays a proper musical "Staff" - which is the two linked sets of five lines of Treble Clef and Bass Clef just like you see on a piece of sheet music. There's a menu selection to let you see a given number of bars on screen. I found that two bars was plenty - any more and it got too complicated. A number of boxes below the Staff display hold Notes, Rests, Sharps & Flats etc and all are mouse selected for placing in the right place on the Staff.

You may Tie notes together and even use Triplets (this has three notes playing in the time it would normally take to play two) and of course you can select Volume and Tempo with a slider control. Tuning may also be done with a slider and this is useful if you want to play your violin or trumpet etc along with your computer music and the computer is a little out of tune. Simply adjust the slider and have your music playing in the same pitch as your own instrument.

If you don't want to place each note on the Staff by mouse you can choose instead to play them on the Piano Keyboard at the very bottom of the screen. This has 48 keys and whatever you click onto there will be played so that you can hear it and the note you played will be automatically placed on the Staff. Come to think of it, this is a great way to learn what the keyboard note looks like when written down and it could be quite a good teaching tool when used that way.

When entering music you first of all set the Key Signature from a requester window. This sets how many Sharps or Flats are in the key you pick and it also tells you the name of the Key. For instance - the Key of G has one Sharp, the Key of Eb has three flats, the Key of D has two Sharps, and so on. All this is shown in the little window when you're choosing the Key and again it's good for teaching.

Setting the Time Signature is very easy. This display just has two boxes one above the other where you enter the appropriate numbers. 4/4 time is used for March Tunes, Rock & Roll, most Pop Songs etc whilst 3/4 time is used for Waltz Time. Experienced musicians will know that there are many more Time Signatures and of course they're supported here.

MIDI is supported too, but only to the degree that you can plug in your electronic keyboard via a MIDI interface and have your tunes played back through its instruments. You can't actually enter musical notation using the keyboard. Once again, horses for courses, and dedicated music software that does allow that kind of input is more highly priced.

Music has editing features similar to word processing in that you may Cut and Paste sections of music from one place to another in your song. Very useful when the first bit is repeated after the middle bit plays. Simply cut and paste it as you do with text when writing documents.

When your masterpiece is ready to play you can play all four tracks together or select individual tracks to check if you made any mistakes. At this stage you can change instruments for a different sound and do all your actual fine tuning. It's a good idea with *Music*, just as with all other programs where you're spending time inputting material, to save your work regularly. That way if you mess it up you can reload the most recently saved version and start over.

I liked the *Music* program and can see that it has much appeal for computer hobbyists who like to play around with music. Whilst it has full music notation and voicing I found it lacking in the printout department however. The printed output bears no resemblance to the lovely illustration of printed music on the otherwise excellent packaging and looks for all the world like a screen dump of quite blocky graphics. The printout is not acceptable for musicians to work from as notes and rests overlap and become quite misleading. Also, the program itself doesn't support the use of "beamed" notes and all notes smaller than crotchets are represented individually. It's accepted musical practice that quavers are beamed together in all except special parts for vocalists (who apparently prefer running passages of separate quavers).

Printing misgivings apart, the *Music* program works quite well and it is a useful part of this suite of programs. I found the suite to be quite good value and it certainly has a niche in the Amiga marketplace. ❑

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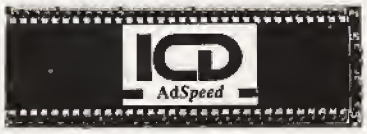

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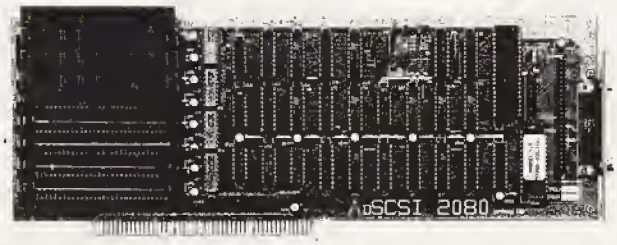

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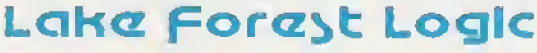

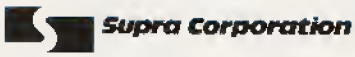

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MORE ON THE 24-BIT WARS

by Tim Strachan

What is 24-Bit colour ?

The story so far (with help from an article in *Amazing Computing*):

24-bit colour is three separate images, one for Red, one for Green and one for Blue. Each image is monochromatic and may have a value ranging from black to white - all of this is the same as a standard Amiga pic file.

However such a pic file, if hi-res, may only have 16 distinct levels of grey between the black and the white, whereas the 24-bit file has 256. The "24" number comes from the fact that each colour has 8 bits of information per pixel. This means that there are 2x2x2x2x2x2x2x2 = 256 (or 2 to the power of 8) possible shades of each colour per pixel; or 2 to the power of 24 possible shades for each pixel when all three colours are combined. And that comes to about 16.7 million colours when you multiply it out.

Another point is this: on a good overscan Amiga monitor, you'll get 736 x 512 pixels, say, or about 376,000 pixels. So of course you can't have "16.7 million colours onscreen" as you sometimes read - you have a maximum equal to the number of pixels, each of which could be selected from that palette of 16.7 million colours.

Further point: transferring 24-bit images to videotape is only as good as the system allows and here we get into the incredibly complex, confused and crepuscular region where live NTSC, PAL and the whole American/rest of world divide, SECAM, HDTV, digital composite video and all the arcane mumbo-jumbo which constitutes the world of TV and video at present. And here I appeal to a video-knowledgeable person to explain further. Any takers?

Black Belt System's Ham-E

This is a box that sits between your Amiga and any RGB monitor such as the 1084, and gives you either 256 colours onscreen from a palette of 16.7 million; or full 18-bit display, giving over 262,000 colours. Also included is software which takes regular 24-bit IFF files (yes, it is a Commodore standard now) and turns them into HAM-E style images of either type. ASDG's *The Art Department* supports this format too. Also provided is a paint program, whose source code you can get for free. Like MAST'S ColorBurst, it doesn't need any other drivers, or patches, or whatever. Cost is US$299.95, and more info from: Black Belt Systems, RR1 Box 4272, 398 Johnson Rd, Glasgow, MT 59230. Tel: 406 3675513.

Colorburst 24-Bit card

This is now in production and available from MAST. It will be interesting to see how the various boards measure up against each other in the marketplace. Enquiries: (02) 2817411. (Look for a full review in the current issue of *Professional Amiga User* magazine).

Video Blender

An external device which combines a video switcher, genlock, audio mixer and luma-keyer into one unit. It has 4 video channels: NTSC RGB (externally synchronised) in; Amiga RGB in, composite video in (with pass-thru) and internal 16-million colour generator for background. You can "slave" video cameras and 24-bit framebuffers and other exotic hardware to it (and connect the Video Toaster if you want NTSC output), and it is claimed that no time-base correction is required.

Included software allows for 256 colours out of 16 million; and MixMaster software includes over 2800 predefined wipes as well as a custom wipe generator system. Comes in both NTSC and PAL versions, for US $1295. More info: Progressive Peripherals, 464 Kalamath St, Denver, CO 80204, USA. Tel: 303 8254144.

Video Master 32 coming...

[This info courtesy Graphics Palette Disk-magazine.] A 32-bit dual frame buffer board with 24-bit painting and 24-bit digitizing capability. *VideoMaster* is based on the 34020 32-bit second generation graphics processor by Texas Instruments, with optional 34082 32-bit math co-processor. *VideoMaster* plugs into the Amiga 2000 and 3000 series computers, but uses its own internal RAM and processor exclusively, making it a virtual video work station for professionals.

VideoMaster offers dual frame buffers, each with resolutions of up to 1024 x 1024 in 24 bits (over 16 million colours) with 8 bit overlay (256 colours). The frame buffer can display out in resolutions up to 800 x 600 and 1024 x 512 in over 16 million colours. Instantaneous buffer display switching hue, saturation and contrast may be quickly adjusted through software for the perfect video image.

Video Canvas 24, a real-time 16 million colour paint system, is included. Video artists may use the *Video Canvas* to create graphics in a scrollable paint area of up to 1024 x 2048 pixels. The *Canvas* updates the display instantaneously as the user paints. Standard IFF images may be loaded in and upgraded to 24-bit images, then saved as 24-bit IFF images or in VCAN, *Video Canvas'* own 32-bit compressed custom format.

VideoMaster offers optional real-time 24-bit video digitizing in all Amiga video resolutions up to 752 x 525, including overscan. NTSC (or PAL) composite or NTSC (or PAL) video signals may be digitized in 16 million colours in 1/30th of a second, shown on the external display, or stored for later recall or editing.

VideoMaster provides real-time video resizing, live 'window within a window', animations, solarization, polarization, zoom up to 8:1, and an unlimited number of real-time ADO-style effects: flipping windows, inversion, rotation, and countless others.

VideoMaster's design includes a programming and data RAM storage area of 1meg, expandable to 8megs. This area may be used for running very fast custom 34020-based applications, such as 3D rendering, animation, ray-tracing, image processing, and ADO effects generation software. VideoMaster is scheduled for release in the 1st quarter of 1991. It comes with Video Canvas 24 software, diagnostic and control software, illustrated manual, VHS tutorial videotape. Many configurations are available, from a single-buffer 32 MHz system with 1meg program storage RAM, to a double-buffered 40MHz system with 34020 co-processor, 8meg program storage RAM, and digitizing capability. All configurations available in NTSC and PAL. Price currently unavailable. ❑

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AmiForum 91 - Show Report

by George Kimpton

America has its Ami-Expo and World of Amiga. England and the Continent have their Amiga Computer shows. The rest of the world all have these big Amiga showpieces where the customers wander around in a euphoric daze caused by all the goodies on show, so what do we have ?

We have AmiForum 91, up to now the only serious place we can go to talk, eat and dream Amiga in Sydney apart from the various user clubs. (Don't forget The World of Commodore Show from July 12-14th). For those who did not manage to visit "AmiForum 91" on the 5th June for the first time or perhaps those who don't know what it is, it is the brainchild and very healthy baby of the Australian Amiga User Association Inc. (A.A.U.A).

It is held in the Parramatta Town Hall, Sydney, in June. This was the second show at Parramatta and seemed to be as great a success as last year with standing room only inside, and a continuous stream of visitors willingly paying up to enter. Maybe we need a bigger venue next year.

The only disappointment was the limited support by the software and hardware importers and distributors. For those who follow the overseas magazines there were a lot of goodies missing from the displays. This is not a criticism of those who had stands or the club that organised the show but a big black mark to those who couldn't be bothered to be present.

Sitting here now thinking what to say and resting my feet after three hours at the show, talking to lots of people and seeing lots of interesting software and hardware going through its paces, I must say I would not have missed it. It was well worth going to see.

There were 18 stands in the main hall without including the display on the stage where Commodore demonstrated, for the first time in Australia I believe, CDTV around lunch time. The demonstration was certainly impressive and probably left a few wishing their wallets were a little fatter.

Just prior to this demonstration Patrick Byrne, Commodore Business Machines Australian Managing Director and President of Asia/Pacific, officially opened the show. He indicated that Commodore Australia was very happy to be supporting the good work of the A.A.U.A. and was entering a new phase of support to the Amiga and its users and had high hopes for the future.

New Commodore Help Line

I am told Commodore as part of its new image now has a HelpLine for those with problem; this is something that was long overdue (428-7666). Talking after the opening Mr. Byrne indicated to me that the forthcoming World of Commodore Show, from the 12th to 14th July at Darling Harbour, would be an eye opener with many overseas companies being represented.

I believe it is vital that we all get behind the July show and make it clear to the Amiga knockers and MS-DOS or Mac users that the Amiga is a force to be reckoned with. This will be our Amiga showcase because of its high public profile so let's tell everyone.

Who was there

Looking around AmiForum 91 I found the stands contained a number of old faces and some newcomers.

There were also some reminders of the talent and ability we have in this country. I personally spoke to at least two software developers, Craig Fisher with his *Contact 1.2 List Manager* on the Desktop Utilities stand and Arthur Winarczyk of Lisa Developments with his "5GL-Lisa" Business software.

Also seen was Wal VanHeckeren, designer and builder of the Prism Pal Colour Splitter. There was also the Colorburst hardware which was developed by Gary Rayner on show at the M.A.S.T. and Computer Spot stands.

The demos of Colorburst certainly left the mouth watering. The clarity and colour of the pictures was first class with no interlace flicker noticeable. This I am told is because with so many colours available the normal sharp boundary contrasts which cause interlace flicker do not occur.

Computer Spot also ran Colorburst with the Neriki and Vidtech genlocks. The RocGen genlock was also running and I was informed by Kerry Bailey of Matrix that the problems I had encountered when reviewing it had been fixed.

Top left: Kerry Bailey on the Computer Spot stand. Bottom left: Graham Wilson, Sydney Uni TV Service, with Frank Keighley, Desktop Utilities. Right: Chris Dunbar showing CDTV

Also of interest was a demo by Computer Spot of animations, produced on *DPaint III* and run using *Scala*. Very smooth and fast. This program was reviewed recently by Andrew Farrell in *Professional Amiga User* magazine.

For the music freaks there was Rythmic Bytes putting *Bars and Pipes Professional* through its paces and giving a lot of enjoyment to those around. Basically a mail order business, they handle musical software and Roland modules in packages to suit your needs with quite a collection of midi sequences.

Hard Disk Cafe certainly put on a good show, offering digitised portraits using the Ion Camera for only $2. I think it was one of the busiest stands with potential customers standing three deep waiting to be served. Karen sure must be doing something right.

Tim Strachan with Megadisc was also very busy answering questions and hopefully signing up new subscribers. In fact most stands were so busy that you had to queue up and wait your turn to get to the front. Maybe next time we will need traffic lights or something.

Among the other stands were two newcomers in John Fonhof (Fonhof Computer Supplies) with the ATonce Vortex Amiga 500 IBM emulator and Bruce Casey (Casey's Computers) who was showing the new GVP A500HD Series II hard disk.

Also present was Unitech Electronics with their switchable 1.2/1.3 Kickboard suitable for all model Amigas except the 3000. Unitech also do a quick turnaround in Amiga repairs I am told.

Talking of repairs, Sibnet and Frank's Computer Hospital were handing out pamphlets with 10% discounts offered. Mark Harwood (Sigmacom) was also present displaying reconditioned drives etc. and the new GVP Accelerator and Hard Disk conversion to upgrade your old 2000 to a 3000. Look and drool, the price was around $1700, I think, with 1 Meg of memory.

Harris Hi-Tek were present showing their screen filters and some terrific artwork. Desktop Utilities were also present demonstrating their services and some business and educational software plus clipart disks.

Dataflow were holding up the software end with a range of software on sale including a three in one educational package. Macarthur Girls High also had a stand demonstrating education uses for the Amiga, and Graham Wilson who operates the Video Department at Sydney University was displaying some of the Interactive Tutorials used by Sydney University as part of its educational program.

The show was certainly a credit to the A.A.U.A organisers with, I gather, much of the credit going to Harry Scruton and Gary Colligan who seemed to be everywhere at once chasing up late arrivals and making sure everything went smoothly. Good work fellows, let's hope next year's will be as successful and, with a little more support from the industry, bigger. ❑

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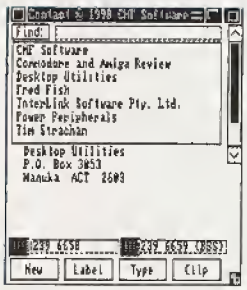

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See your Commodore dealer for all you need.
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Public Domain Software for Educational Purposes

by Anne Glover

Last week an educational administrator (and friend) said to me "Well, Anne, I have finally purchased my computer, but now there is no money left in the budget for software." I wish I had a free PD disk for the number of times this has been said to me!

This is still happening on a large scale both inside and outside educational institutions. The level of frustration and the associated loss of productivity is quite evident. By the time some more money comes through, the initial enthusiasm for the computer has worn thin and even the needs of the institution may have changed significantly.

The frequency with which administrators, teachers and home educators face this problem is hopefully declining with the advent of the practice of packaging software with hardware. The Amiga 500 Starter Kit for example may now come with *Kindwords* and *Fusion Paint* plus a number of other programs. This is obviously a more practical and painless way of getting started. The additional software only increases the cost of the package marginally, yet allows you to get stuck into the computer immediately.

Until purchasers, budgeters and other decision makers view software and hardware as a package to be purchased together, the problem will continue to exist to some extent.

A solution

Understandably, many people are still going for the biggest and the best hardware or being swayed by megabytes and compatibility. Instead they should turn the search around and look at their own needs both now and in the future. Determine what the computer will potentially be used for in the school, workplace or home and purchase their hardware and software accordingly.

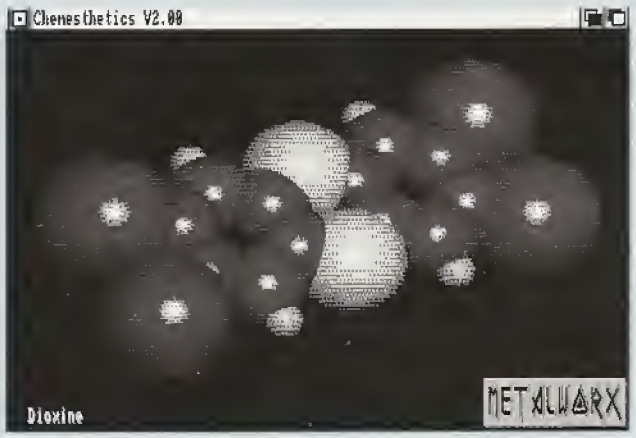
So often, schools and families fall into the trap of buying multi megabytes and micro software, when a more balanced view would often result in less megabytes, more software and an associated increase in enjoyment, educational advancement and productivity.

So the message is: do your homework, determine your needs both now and in the future, look at how the computer may be used in your situation and buy according to that need. Don't be swayed by the nifty salesmen!

OK, so you have still spent virtually all of the Department's / school's / family's budget on the hardware - so what now? This is the time to have a good look at what is available in the Public Domain arena. If you are unsure of the meaning of Public Domain software and its availability, read all about it in ACAR's column "In The Domain".

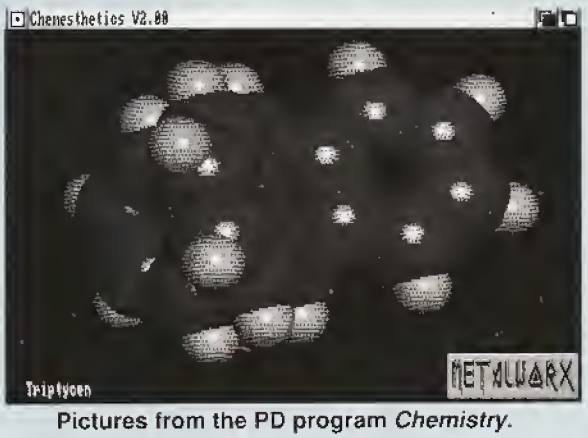
In the wide spectrum of education there are a range of PD disks that may be of use. First of all you should grab a listing of all the PD disks that are available in your particular format. The *Amiga Annual* for example has a listing of all the Fish disks numbered between 200 and 400. A number of commercial organizations advertised in this magazine provide disk based listings of PD disks for you to peruse.

Some of the areas to look at include computer aided design (CAD), word processing, communications, programs that enhance and develop skills in logic and databases as well as a general introduction to computers. A number of PD distributers provide "theme disks" that have a compiled group of programs with a common theme, these may especially be worth looking at. At $5 or so a disk, you really cannot lose!



What to expect

PD software obviously hasn't had the same amount of time and money thrown at it as commercial software, so don't expect the same refinements. The PD software you purchase may have a few (or a lot) of bugs in it, it may be difficult to load, hard to understand and be lacking in user friendly devices or pretty graphics. If you are prepared to face a few problems and a percentage of failures you will also be delighted as you come across the occasional gem in this treasure trove of mixed fortunes. After all, lets face it, if you do come across one useful program every now and then, you will be still be streets ahead while having a lot of fun (and frustrations) along the way! ❑



Pictures from the PD program *Chemistry*.

RHYMING NOTEBOOK

by Anne Glover

"Do you know anyone who likes to rhyme?
Well tell them now is the perfect time
to check out this program from First Byte.
It's sure to whet their appetite
for poems, lyrics and the like
and force other methods to take a hike!"

Rhyming Notebook is a very specific program. It will be indispensable for anyone who is into writing with words that rhyme. This program allows you to call up a list of words that rhyme with your chosen word. It has a 30,000 dictionary to assist writers, poets and lyricists in their task.

The writer is therefore able to concentrate on the creative process by letting the computer do the mechanical work of presenting rhyming word options. If for example, you put in the word "rhyme" you will quickly be presented with 24 options to select from. Making life easier for the professional rhyme writer and the rhyme fanatic alike.

This program will be of use in schools that wish to promote the enjoyment of words for their own sake. Playing with words is an easy way of increasing vocabs as well as a method of becoming more confident and comfortable with reading and writing. A love for literature could be fostered by introducing this program.

The *Rhyming Notebook* is however a lot more than just a dictionary of rhyming words. It is a simple word processor in its own right. It won't do all the gymnastics of your top end word processors, but it will allow you to type in and make changes to your poetry. The edit menu allows you to cut, copy and paste sections of your work, it can then be saved or printed up for your perusal. The speech menu allows your writing to be read back to you, providing a new dimension in proof reading.

Like all First Byte products, this one is well made, is easy to understand with simple pull down menus and a useful handbook. It is designed to be used by ages 8 to adults and is appropriate for that age range. Younger rhymers could use it with some assistance, but the words are not just kids' words. Instead the range of words will suit both professional rhymers and playful ones alike.

Conclusion

This is not a program for every family or school to purchase as it has a quite specific usage, but it is one that will be indispensable for some users.

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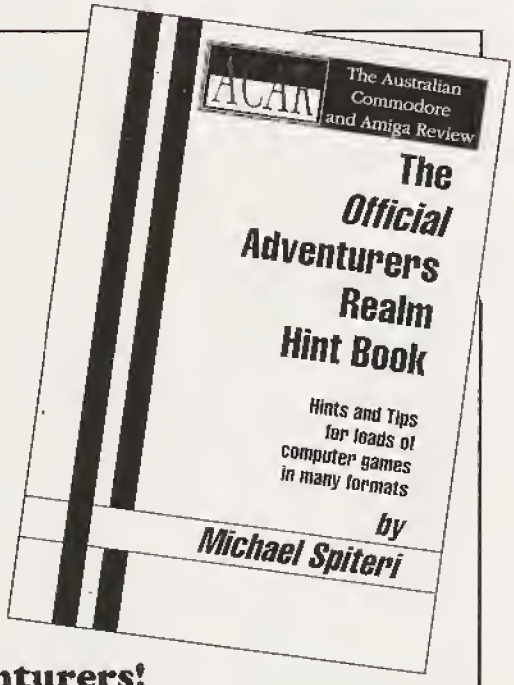

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Rody and Mastico

by Anne Glover

Here is a colouring program with a difference. *Rody and Mastico* is a child's mini adventure game and a colouring program in one.

Your child must help Rody find the missing "multicoloured star". This star is a vital piece of equipment because without it. Professor Gabino's chewing gum machine will not operate. Mastico the robot will assist your child and Rody in their search by providing a few clues along the way.

To find the star, the child must listen to the clues, observe the screen and use the mouse to indicate their answers. An image of Mastico's head is used as the on-screen pointer. The child may be required to put Mastico on the longest sunbeam, or on the hidden door before they can move onto the next scene.

All of these activities will get the child thinking. They will need to listen. comprehend and then distinguish between alternatives as they decide on the longest, the strongest and the largest number. Logic. memory and language skills are developed as well as mouse manipulation.

At times it is frustrating getting Mastico on "exactly" the right spot. After reading the manual (like many people, I do this AFTER playing with the program) I realised that the bottom left-hand point of Mastico's head is used as the pointer. This sure made life a lot easier the second time around! So do as I say and not as I do and read the instructions first, or at least second anyway. I know it's difficult to sit and read a manual when your fingers are itching to turn on the Amiga, and it doesn't make it any easier when the kids are willing it to run.

Rody and Mastico is a synthesised speech program. It is reasonably easy to understand, but young children may need some help initially. All of the messages are printed on the screen and the voice can repeat any message if the child needs to hear it again.

Some of the answers are very obvious, such as, look for the boat with the largest number of portholes. Others are less obvious. If the child (or parent) selects the incorrect point on the screen there is a graded response to that answer. If you were close to the correct point you will hear "Almost there, look a bit harder". If you are miles away, Mastico says "No, start again", with appropriate but not too threatening sound effects. This approach helps "non chewing-gum literate" parents hone in on the correct spot.

This is a pretty neat little program, it has a good feel to it and is pleasant to use. It is not a long adventure. and is not intended as such, but it is one that will interest your child as a diversion to the colouring program also on the disk. The story doesn't change with reruns but it does have a bit of flexibility with the choice of additional (more difficult) questions on many screens. For the littlies. the opportunity to stop and colour-in for a while before proceeding with the short adventure provides them with enough variety.

One problem with this program is that each stage is completed by answering a question or pointing to a part of the screen. However, some additional screens, also have text in the form of a question, e.g. can you see the star? The child naturally tries to reply to these questions as well and some confusion results as no answer is required. The other problem is that your child will outgrow this program fairly quickly, but it could still be a favourite for quite some time. Don't let Rody's little helper play frisbees with this one, it is heavily copy protected.

Any of the adventure screens can be selected for colouring. These are not the very easy fill-in screens like some on the market, they are quite detailed and suitable for 4-7 year olds. As well as having 15 colours to choose from, there are also 30 great patterns that can be used with the colours. So Rody may have a checked blue shirt and flecked red shorts, while the Professor has a green poker-dot tie! This adds an extra dimension to the colouring program. This one however doesn't have a free-hand function for their own additions. Any scene may be saved or printed to show off to Grandma or to build into their own booklet of *Rody and Mastico*.

Conclusion

This program really represents excellent value. It includes both an unusual colouring program and a mini adventure game at a very reasonable price.

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Ports of Call

by Anne Glover

The object of this game is to run a successful shipping company. More successful that is, than any of your competitors, or, to at least keep yourself afloat until the end of the game. This involves managing your initial $4 million in a way that will achieve your goals. Will you purchase high tech. ships that will be in a better state of repair and be able to move faster, or will you go for pre-owned or low cost ships and save some of your money for the stormy times ahead?

Fortunately, the initial $4 million is free of debt, so you will not be servicing hefty repayments in the early days. However, you may find yourself in debt up to your portholes after a few years!

Later, the student will need to decide how much fuel to buy, whether to repair their ships, what products to take on board for which locations, all for varying returns. These details are based on the real maritime world and naturally have a few unforeseen variables cropping up from time to time.

At sea

Once your initial decisions have been made the ACTION begins. You, as captain, are required to manoeuvre your ship out of the port without slamming into the wharf and incurring additional damage to your precious capital equipment. This is where the educational component drops away and the "game" takes over. Some careful manoeuvring with a strange mouse controlled mechanism is necessary. It does take a bit of getting used to, but it is quite effective at simulating the slow response of a large ship's steering mechanism. The same procedure occurs when you reach your destination port.

I was quite proud of getting my ship into its new berth without losing a part of its stern the first time I played this game. Especially as my games mad husband wiped out! My glee was short lived as I realised I was in back-to-front, and there was no way I could turn around without wiping out half of my ship. Oh well, only $0.3 million in damages! I'll sell my house, car, Amiga and kids to pay for it.

If you wish to get on with accumulating your millions and establish yourself as the first Australian Aristotle Onassis before the end of this century, skip steering your own ships and employ a tug. Yes, it will cost you more initially, but you may save on repair bills. So this game can have a number of different styles depending on how it is played. Other variations include the ability to involve 1, 2, 3 or 4 players or they could be groups of players in the classroom. Games can be played as beginners, experts or as a genius over 1, 2, 3 or 4 hours.

Variation

No two games will be alike. Not only do you need to input a lot of your own selections but a number of variables are also thrown in. All will influence the outcome to some degree. Changing weather conditions, tug strikes or being offered contraband will keep you on your toes (or on the edge of your chair). Further, as you become more skilled you will have access to larger ships, more ports and potentially more income.

This is an easy game to get into, information can be saved for continuation at a later date. The graphics are clear (although the two most realistic graphics are of the two game designers themselves) and the sound effects although limited are quite good.

Conclusion

Ports Of Call is a true game with some educational potential thrown in. It could be helpful in the classroom or at home for jaded students who are not motivated by the run-of-the-mill educational software. Students who find it hard to make decisions, or cannot see the long term consequences of their actions may get some benefit from this game. Teacher could use this program as a jumping off point for studying a number of topics in Geography, Maths, Social Science or Economics classes.

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COMMUNICATIONS UPDATE

by Jonathan Scowen

In February, we published the number of BBS in Australia - here is an update collated by the Australian BBS Listing:

		may	feb
ACT	TOTAL Systems:	19	12
NSW	TOTAL Systems:	198	184
VIC	TOTAL Systems:	155	161
QLD	TOTAL Systems:	79	72
SA	TOTAL Systems:	42	44
WA	TOTAL Systems:	45	43
TAS	TOTAL Systems:	10	9
NT	TOTAL Systems:	4	4
AUST	TOTAL Systems:	552	529

The statistics given by the BBS Registry show some very interesting figures. In May there were 37 new BBS's! This is quite a lot for one month. Out of these 37, 18 of them were in New South Wales.

Networked Chat Mode!

I was talking to Ross Delaforce, the SysOp of TeleInfo (Sydney), and he mentioned that he was planning a massive conference with eight other BBS's in Australia (NSW, Vic, SA, WA and NT) plus Byte BBS in the USA. He would like to link up to the BBS's in Australia for three hours and the one in the USA for one hour. This chat could allow 170 or more people to chat at one time. This will be possible by a program called *NetChat*, which allows one BBS to call another BBS and then everything that is said is duplicated on to the original BBS.

Access information

Mem	Membership required for full access.
Reg	Registration required.
VA	Visitor Access to most functions.
LVA	Limited Visitor Access available.
Public	Public board, open to all.
File Server	FidoNet File Server.

Baud (modem transmission mode) information

V.21	300 Tx / 300 Rx CCITT
V.22	1200 Tx / 1200 Rx CCITT
V.22bis	2400 Tx / 2400 Rx CCITT
V.23	1200 Tx / 75 Rx CCITT
V.32	9600 Tx / 9600 Rx CCITT
V.32bis	14400 Tx / 14400 Rx CCITT
PEP	9600+ PEP Protocol Modem
HST	9600+ HST Courier Modem

Line Noise

How often have you been on a BBS and all these strange characters come up all over the menus? This is what they call 'line noise'. It is caused by many things, the most common being a bad phone connection. Line noise is like static when you're talking on the phone. Some phones can cause line noise so it is often best to pull out your phone before using the modem (but remember to put it back afterwards). To fix line noise I guess we are just going to have to put up with it until better quality lines are installed.

BBS Registry

The Australian Bulletin Board Registry (or BBS Registry for short) was formed to resolve the problem of obsolete Bulletin Board lists. The National Coordinator produces on the first Monday of each month a list of the systems currently held on the Registry files. Most FidoNet systems carry the current list. The lists are FREE to anyone except for commercial uses where you must support the BBS Registry by means of donations/sponsorship. The Registry was previously known as "Australian Public Access Message Systems (PAMS) Registry".

When viewing the lists, you may find some abbreviations that you will not know. See box for explanations.

Unless otherwise shown all BBSs are 8 bit bytes, 1 stop bit, no parity. I can not print these lists in the magazine for several reasons, one they are very long and two, it would not pay. The BBS lists are available on the majority of BBS's, if not ask the SysOp where you can get them from.

Some good BBS Numbers

A 'Bulletin Board Service' is a place where people call and exchange Public Domain (free) files, information (by means of messages), play online games, chat to the other users online and basically enjoy themselves.

The SysOps (System Operators) who own the system try their best to make sure that the system fulfils the above things. Some BBS's have topics - for example an animators BBS, one especially for Demos and so on. Then there are the ones who have the lot.

Teleinfo

(02) 975-1099

This is Sydney's largest BBS. Large file areas for Amiga, C64/128 and the majority of other computers. It is multiline and you can get a real exciting chat going (or should I say argument?).

Dense Mist

(02)416-3143

This BBS uses SkyPix, if you have not seen them, you don't know what you're missing. Skypix allows animations, sounds, normal graphics and the use of your mouse (but you must use *SkyTerm* or *JRComm V1.01* terminal programs to use it). Since my last mention of the BBS, I gave it another call and found a vast change since the expansion of the hard drive space. The only problem is it's VERY slow, but the graphics are great!

The Sidecar Express

(075) 46-8253

This BBS is run on an Amiga with 480 Megabytes online and 2 lines. The BBS consists mainly of a Amiga file base with some support for other computers. Brendan (the SysOp) also distributes *Paragon BBS* Software in Australia.

Adam BBS

(08) 370-5775

20 lines, biggest file areas in the southern hemisphere and the origon for NetChat not to mention this BBS has all PD disks - Fish, Amicus, FAUG, TBag, Topik, etc.

Distributor BBS

(08) 341-5525

WOW! What a BBS. This one is well worth the money. Distributor BBS has 12 lines currently. It offers support to Amiga, C64/128, IBM, Apple, Macintosh, Tandy and others (with IBM being the biggest area). What I enjoyed the most was the originality of his menus, which is very hard to do (unfortunately someone has already stolen them!).

At first I thought that the membership fees were quite high but when you consider what the SysOp has to pay it's a bargain. The files on the BBS are recent

and up-to-date. The SysOp calls the USA direct and gets files (a very expensive way of doing it) so you can be assured that files come through Distributor before other systems. See SysOp interview for more information.

C64 News

Ok, all those C64 users, here is your special area after so many requesting a mention. The area will have to start next month sorry, this month was very busy for me...

SYSOP/BBS Profile
BBS Name : Distributor BBS
Phone : (08) 341-5525
SysOp : Steven Dunk
Supports : Amiga, IBM, C64 and others.
Lines : 12 lines
Bauds : 9600 and below.

Steven is a very experimental and daring SysOp. Steve never copies anyone else's ideas so all his ideas are original. He has the best menus that I have ever seen (and of course his was the first BBS to have them). Some BBS's I call have a lot of "loose ends", but the Distributor BBS is perfect in all areas.

The Distributor BBS opened in November 1989 with four lines and 300 Megabytes online. Less than six months later another four 2400bps modems were put online and another 150 Megabytes! Then in September 1990 another 380 Megabytes was added (that means he has 830 Megabytes at this stage!!). In four months time three more lines were put in (with one 9600bps modem and two more 2400bps modems). In March of this year another computer was attached to his main computer with 380 Megabytes on that one, and then in April another 250 Megabytes was added, and guess what ... it's still growing!

I told you the history of the BBS to show the rate of growth and how much Steve puts into it.

All files are very recent as Steve downloads the files from the USA! The main areas are IBM and Amiga but there is about 50 Megabytes of files for other machines (C64, Mac, Tandy, Apple, etc.). Steve also gloats on the fact that he has a very large GIF file area with "anything you want a GIF picture of".

I asked Steve why his BBS was so popular. Steve replied, "I don't really know, but I feel the BBS has a nice feel to it and the novice user doesn't get lost". On every menu Steve has a help option which explains all the options of that menu, so if you are new, you always know what you are doing.

"The whole BBS has been designed to be logical in its layout." Steve continued, "Also we have some of the freshest files around as I download them straight from the USA and don't wait for files to eventually filter through." No PD disks are online but instead they are broken up into separate programs for downloading.

I then asked Steve why he set up a BBS.

"The original concept of the BBS was to fill a small gap in South Australia, there was a lack of fresh files, but the BBS just kept on growing and dragged me along with it."

Did he ever regretted setting up a BBS? "Yes, at times it's a very unrewarding hobby, no matter how much effort you put in or how much money you spend on it, there is always someone out there grizzling about something or another. At times I just feel like pulling the plug on it and walking away from it all and

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taking up a normal hobby. Most users don't realise that to keep a large BBS to tip top condition consumes nearly every free moment I get. It's been two years since I have been to bed before 12.30 to 1 am and on many nights I am still on the computer at 3 or 4 in the morning finishing something off, but it's an addiction so I don't think I'll ever be able to pull the plug on the BBS."

I asked Steve how much his BBS costs him to run - "A very hard question ... I have wasted so much money on mistakes and experimentation, but at a rough guess I would think I have spent about $50,000 on it. The running expenses vary depending on replacement costs, but with phone bills and repairs I have to put about $600 a month on top of what members send in."

Steve finished up by saying "The bottom line is, don't ever think you will get rich out of a BBS, it's quite the reverse, it would help if you are rich before you start." So give Steve a call, even if it is a STD call, call in the off peak times, it's well worth the time and money. While your there leave a comment to Steve about the board.

Get Started Communications Disk

Just another small reminder, if you have just bought your modem and need a terminal program you can send $5.50 to Prime Artifax at P.O Box 288, Gladesville 2111. In return you'll get a disk full of programs to help you use your modem, including NCOMM (which is FREEWARE and now comes with an excellent script language), compression utilities. Postage is included. This for the Amiga only!

Also any SysOps who would like their BBS reviewed - you can contact me at the address below or at my BBS. I would be happy to review your BBS if requested.

What's happening next month? I will give you some hints about BBS's and more BBS reviews plus some more SysOp interviews.

If you have any questions or comments I can be contacted at:

Jonathan Scowen, PO Box 162, Epping NSW 2121 - ALL AMIGA BBS (02) 876-8965. Until next month, happy BBSing and be nice to the SysOps! ❑

The GEOS Column

by Owen James

Laser Output Service

In the geoNews this month is a laser printing service available to Australian GEOS users. An Apple LaserWriter is used, and the output from this setup is good enough to rival even the most expensive of platforms.

Laurent Rinaldi would like to hear from interested readers to give him an idea of numbers etc. His telephone number is (02) 922 6355 (work), or (02) 888 3329 (home). This will be fabulous for GEOS users wanting professional output for their documents. Hopefully I'll have some more information about this for you next month.

GEOS Public Domain

This month we're going to look at some more public domain and shareware GEOS applications. They should be fairly easily obtainable from user group libraries and public domain suppliers.

Name: **Blackout**
Author: Jim Holloway
Type: Application

Blackout is a simple to use GEOS application that blanks the screen when the C64 is not in use. When a static image remains unchanged for long periods of time, the display can actually burn into your monitor or television (televisions especially) leaving a picture that just won't go away. *Blackout* fixes this by turning the screen black when no activity has been recorded for a period of time. A quick flick of the mouse will bring your screen back. You have the option of a long or short pause before *Blackout* goes to work. *Blackout* takes up only a very small amount of memory, and is thoroughly recommended.

Name: **Analogue Clock V1.2**
Author: Charles W. Bozarth
Type: Desk Accessory
Shareware: $2 - $5 recommended

Analogue Clock gives an alternative to the usual digital time readout. It provides an image of a clock with a second hand, hourly chime, and 'tick' sound for the seconds. It also has a digital readout at the bottom of the display. *Analogue Clock* is fine if you just plan to use your C64 as a clock, but other than that it's a little bit pointless. When the clock display is active you can't use any other GEOS function. Nice idea, but we already have an on-screen digital clock that keeps going as we do our work.

Name: **GeoSliders V1.0**
Author: Lester Gock
Type: Desk Accessory
Shareware: $??

GeoSliders is a desk accessory that is guaranteed to keep you frustrated for hours! It's a GEOS version of the old lettered sliding puzzles. It consists of 15 lettered tiles arranged in a 4 by 4 matrix with one empty square. You must arrange the letters into their correct order by sliding them one by one - no simple task! Good in-game instructions are provided, as is a timer to keep reminding you how much time you've wasted. Good fun!

Name: **MacAttack II**
Author: Joe Buckley
Type: Application
Shareware: $5

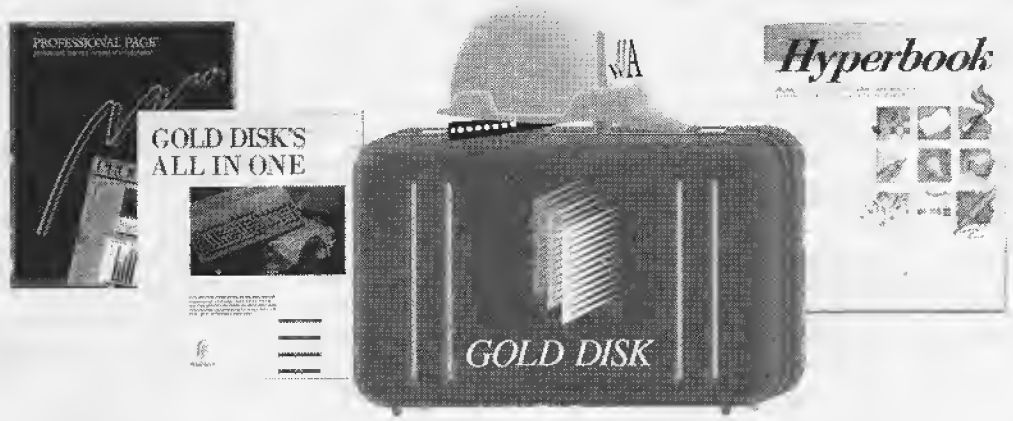
GEOS is very similar to the Apple Macintosh's operating system. *MacAttack* brings GEOS one step closer to the "Big Mac" by allowing picture conversions to and from *MacPaint*. Many options are available such as colour, delete original, picture position, and a 512 or 640 byte header option. The converted pictures really look great. Simple to use, and includes good documentation.

Name: **Convert V2.1**
Author: Not Listed
Type: Application

An early version of *Convert* was available on the Q-Link side of your system disk, but it was totally undocumented in the manual. This update is more flexible and slightly faster. *Convert* is a utility to collapse a USR GEOS file to SEQ. Note that it isn't a utility to turn your *GeoWrite* text into a generic ASCII file, as some pretty strange characters remain after the conversion. My guess is that it is designed to allow GEOS files to

Continued on p62

You know how much fun your Amiga has.



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be sent using a modem, where they can be re-converted at their destination. *Convert* now allows many more file types for conversion, such as Auto-Execute, Font, Disk Driver, etc. It also now offers a 'Select by Name' option.

Mail Bag

Glenn Jones, of Buderim QLD, writes:

"I have GEOS V1.3 and V1.5. *GeoWrite* and all my other GEOS add-ons are all booted on V1.3 except *GeoMerge*. I want to print in NLQ. The only way I have found to do this is with *GeoMerge*, but because it is loaded on 1.5 it doesn't put spaces between words when printing. Is there some way to re-initialize the disk? I don't have *GeoProgrammer* but I do have two MC monitors, one that works in memory at $C000 and one in BASIC memory $0800."

The best advice I can give you is to upgrade to GEOS V2. *GeoWrite 2.0* gives you many more printing options, including NLQ mode. It would certainly save you having to use *GeoMerge* just to print a document! I wouldn't recommend changing the ID on disks unless you really know what you're doing. One wrong byte and GEOS is history! It's well worth updating to V2 anyway. Computermate Australia (telephone 02 457 8388) are the people to contact about upgrading your GEOS system disks.

C. M. Langham, of Concord NSW, writes:

"Dear Owen, I'm writing this letter in the hope that you can help me to obtain satisfaction with my C64C and Epson GX-80 printer whilst using GEOS V2.

"The problem seems to be my inability to find the correct printer driver to enable the printer to print in NLQ or even in emphasize mode. As you are no doubt aware the GX-80 has the two dip switches at the rear of the printer and the Select type facility on the control panel. I have tried all the drivers on the GEOS disk and also the drivers on the Suite 64 Mag 11 without success. Whilst I can get them to print, it is always in draft mode, and this is just not good enough. GEOS seems to override whatever settings are on the printer."

Not owning a GX-80 myself, I'm afraid I can't offer much help. There's no 'official' driver for this printer that I know of. I say 'official' because there are many excellent drivers around that are written by users like you and me. At the moment I'm using an MCS 810 specific driver written by a very talented GEOS programmer by the name of Chris Brand (more about some of Chris's software next month).

Are you printing from within *GeoWrite*? If so then make sure that NLQ is selected from the print requester. I'll see if I can locate a GX-80 driver for you. Has anybody had success with GEOS and the GX-80?

A number of users have written to me with problems with Bruce Lyon's *GeoASCII* listings and other *GeoProgrammer* woes. To be honest, unless you already have a good understanding of machine language on the C64 I would avoid *GeoProgrammer* and instead try either *GeoBASIC* or *Becker BASIC* for programming GEOS applications. *GeoProgrammer* was intended for programmers wanting to get their teeth into the GEOS environment and because of this it's quite complex. Even users with machine code programming experience would do well to try *GeoBASIC* first just to get used to the new environment.

A big thank you to everyone that's written in to give me information about *Vorpal Aid*. No one seemed to actually own it, but everyone's heard of it. I've since been informed that *Maverick* will allow you to make unprotected back-ups of GEOS and even an autobooting 3.5 inch version for 1581 owners. Dennis Connell tells me he wrote a review of *Maverick* and other backup systems which appeared in the 1581 User Newsletter (See letters to the Ed in May ACAR). Thanks to Dennis and everyone else for the information.

GeoTips

■ E. C. Woodwell, of Garran ACT, recommends using Paint Drivers (included in V2) to squeeze more on a page. With a little trial and error they can even be used as an inexpensive page layout program. This can be very handy for putting an incredible amount of information on an overseas airmail letter card.

■ Laurence V. Martin, of Cheltenham VIC, tells us that when using *GeoPublish* combined with *Print Shop*, you have one of the best desktop publishing environments available. Using Graphics Grabber, you can import *Print Shop* graphics to be used in *GeoPublish* etc.

Another application for using *Print Shop* is to use it to print a fancy border, wind the paper back into the printer, and print your *GeoWrite* document. It may take some trial and error to get margin settings correct, but it'll be worth the effort.

■ Angelo Abbattista writes that in the GEOS 128 V2.0 manual it mentions that you cannot change colours of your border and background from the Preference Manager in 80 column mode. "This is wrong! I'm typing this letter in 80 column mode with a light blue screen and a yellow text, which I feel is much softer on the eye than the default black on light grey screen". A lot of people are under the belief that GEOS in 80 column mode is confined to a monochrome screen. This is not so. William Coleman actually wrote a GEOS arcade game (*GeoInvaders*) which works on an 80 column GEOS screen, and in full colour! Don't believe everything you read in the manuals.

That's it for this month. I apologise for it being a little on the short side, but with my system breaking down twice throughout the writing of it I wasn't left with much time. If you have GeoTips or questions contact me care of the ACAR, PO Box 288, Gladesville, 2111. Until next month, have a geoFun time! ❑

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The C 64 Column

by Owen James

Last month we looked at altering the C64's operating system by copying ROM into RAM. This month we have some more POKEs, and a faster transfer method.

The routine we used last month to copy ROM was written in BASIC and because of this it was fairly slow. Here's a routine that will copy BASIC ROM to RAM in about one second:

```
10 POKE 88,0 : POKE 89,192
20 POKE 90,0 : POKE 91,192
30 POKE 95,0 : POKE 96,160
40 SYS 41919 : POKE 1,54
```

Line 10 stores the low and high bytes for #49152 (the end address of the transfer plus one). We get 192 by dividing 49152 by 256 to get the high byte. Since there's no remainder in the calculation, the low byte becomes zero.

Line 20 stores the low and high bytes for the destination address, which is again #49152 because we wish to access the hidden RAM. Line 30 is the low and high byte for the source start address (40960/256=160). And finally line 40 does the quick transfer and switches out BASIC ROM. Note that this is just moving BASIC ROM, not the Kernal ROM. You can modify the above routine slightly to move this also, just remember to POKE 1,PEEK(1) AND 253 like we did last month to switch out both ROMs.

Changing the "READY." prompt is a fairly useless exercise, but let's do it as an example. "READY." is stored from 41848 and can be changed by simply poking new character values. In one of his articles, American C64 writer Randy Thompson suggested changing it to a familiar name. Needless to say I was a little surprised when after typing in his pokes my C64 suddenly prompted me with "RANDY?"!

Changes to your Operating System

How about using punctuation with INPUT? Simply POKE 44140,0:POKE 44144,0. Now try using colons, semicolons, quotes, or anything you like when prompted for an input. They'll be stored just like any other character.

Normally data is separated using a comma (DATA 57,43,66,...etc), but the trouble is that the number keys are right at the top of the keyboard, and the comma key right at the bottom making data entry slow while you reposition your fingers. The simple solution would be to change the data separator from a comma to a more easily accessible key, like the addition or subtraction key. 44183 is the all-important address, so a POKE 44183,45 will allow a subtraction sign to be used in place of a comma.

Have you ever tried to get the ASCII value of a null string? If you have then you would have received an ILLEGAL QUANTITY ERROR. POKE 46991,5 to fix this error which has brought many programs to a screaming halt.

Remember, also, that you can have some fun by editing the C64's error messages. Use a MC monitor to hunt through memory to find the position of the text. Just to get you started, the address for the word SYNTAX is from 41525. Change it to a "HUH?" error or whatever you like. How about an "IDIOT AT KEYBOARD ERROR" for a friend's computer? Enjoy!

Mail Bag

Dipping into the mailbag we find Jason Nieuwendyk of Orange asking,

"What would be needed to use Commodore 64 and 128 software on an Amiga, and is it expensive?"

To run C64 software on the Amiga you'll need an emulator. This translates all the instructions in the C64 program into instructions the Amiga can make sense of. With all the translations and conversions that take place, the emulators are normally a little on the slow side. There is a number of emulators available. Briwall (check their advertisement in the ACAR) offers one for $99.00. Although, you could probably buy yourself a cheap second-hand C64 for not much more. Another alternative is a PD C64 emulator (check out the Prime Artifax advertisement). The only problem is that you need to get hold of an interface to plug a 1541 drive into. They can be purchased for around $US25.00, but you'll need to send away to America for it. If you want to run C64 software nothing compares to a real 64.

Unfortunately I don't think there is an emulator available that can handle C128-specific programs, which is a real shame. It's ironic that one of the few computers that the Amiga can't emulate is a Commodore one!

Joshua Pryor of Teralba, NSW, writes:

"Dear Owen, I think your column is great. I love C64s and hope they never die.

"Do you know where I can get cheap, oldish 64 software? How do I put my programs out on the public domain?"

The best place to get cheap software is probably your local PD supplier. Even with the few dollars for duplication fees, it's still a very cheap solution. Some of the older commercial software titles are probably hidden away and forgotten about in the warehouses of retailers. Just peek at the shelves of your nearest Computerspot shop around sale time. *Simon's Basic*, *Music Maker*, and other titles that have long been forgotten all go for a song. Contact mail-order companies such as Briwall. They often have just what you're looking for.

There's not much effort involved in putting programs on the public domain. Probably the best method would be to pass your software amongst friends with a clear notice of its PD status. You'd be surprised how far it'd get around. Send me a copy and I'll see what I can do for you.

Angelo Abbattista, of Adelaide, writes:

"I need help! I purchased two CBM 1660/300 baud modems for my friend and myself. Although it's great to be able to communicate to my friend via the modem, it's getting boring as we talk and do the same things time after time.

"I am trying to obtain a BBS listing but am unable as every time I try to connect to a BBS it doesn't work ...why? We are using CBM common sense software which was provided with the modem, set the modem as described and try to connect to a BBS which supports B103, and every time we try we get "no carrier". Is there any other way to obtain

Continued on p66

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a BBS listing as we are unable to connect to any to see a list. Why is the BBS listing not printed in the back of the magazine anymore?"

The 'No Carrier' message usually means that your modem is not receiving a contact signal from the BBS. You need to make sure that your modem and the BBS are operating at the same baud rate. Bernard de Broglio wrote an excellent article on communications, which appeared in the *1990 Commodore Annual*. In it, he says that most Bulletin Boards work on 8 data bits, no parity and 1 stop bit. Check your own setup for this.

Also check that you have the correct telephone number. Bulletin Boards close and open on a regular basis and if you use an out of date list you could find you're ringing a private number. People woken at 3am by a telephone, only to get a high pitched squeal when they answer, are not always the happiest of people! BBS listings can probably be found on most Bulletin Boards, but seeing you're stuck right now I'll send you a list of some BBSs available in your area.

Besides giving the writers and the editor of the ACAR a stern slap on the wrist for lack of C64 coverage, Glenn Jones of Buderim, QLD offers us some "Commodore in the Media" sightings:

In *Together in Electric Dreams* the C64 is shown twice and programming books for it are shown. Pity we can't still buy them! And in *Neighbours* an Amiga 500 is not only in the office but also in Paul's home.

Competition

Remember the short program competition. Australian C64 education software developers, Millersoft, has offered three of its packages valued at approximately $90.00, and there's also some compilation disks of the best of C64 PD.

To enter, simply send in your original short and useful programs for the 64. Some examples might be a short routine for the handling of user input within a program, or a utility to print stickers for cassettes or disks, or an automatic number selector for Lotto. Here's the guidelines:

1. Programs must be short. About four or five disk blocks long is the limit.

2. It must serve some useful purpose.

3. Programs can be submitted on disk, tape, or printed listing, though disks are preferred.

4. Entries must be received by August 31st 1991.

That's all there is to it. Get 'em in!

Tips and Tricks

■ You may remember that Bill Woolford provided us with many tips a number of months back. This month he has more for us. The first is a tip for cataloguing disks.

"My disk collection now totals some 200 disks with around some 3000 programmes. This makes finding the right program a bit of a problem. At first I wrote them down in a book, but now I have started using a disk filer (on Suite 64 disk mag 6, I think.)

"I first numbered all my disks 1-200 then I used the same disk number for the disk ID. Each program had a prefix to designate what type of program it was, U = UTILITY,G = GAME, B = BUSINESS, etc. Disk one might look something like this:

NAME=DISK ONE
ID=01

PROGRAM NAME	DISK NUMBER
Space Invaders	G001
Formatter	U001
Word Processor	B001

"Then I could take a printed copy of all the program I had (alpha or numerical) or break them down into separate lists (games or utilities for example). This way you can fill up your disks with anything, and be able to find them without any trouble."

Colin James, of Punchbowl NSW, adds to this by saying that catalogues of programs and subroutines shouldn't be committed exclusively to disk. Hard copy is so much more easily consulted, particularly if you want to check while old faithful 64 is still being used.

Actually I discovered this the hard way recently when my Amiga broke down twice within two weeks. I was stuck with dozens of disks containing my budget, letters, C64 columns and bills with absolutely no way of getting to them. When a four dollar diode can render thousands of dollars worth of equipment useless, it really makes you wonder about the age of the paperless office!

■ Bill also has a solution forgotten function keys.

"If a program uses the function keys, and you can't remember which one to press, make up a template from paper, large enough to fit over the function keys (cut out an area the size of the function keys). Lay the paper over them, then write alongside each key its function. Cover the entire template with clear plastic contact. Cut out the area previously cut for the keys, and just lay it over the keys. Hey, presto! Written against each key is its function for that program. Do the same for all your programs that require function key usage."

■ Joshua Pryor has some tricks for us. POKE 642,0 : SYS 58260, and you'll see the usual opening message but there's 40959 bytes free.

POKE 641,1 : POKE 642,0 : POKE 643,255 : POKE 644,255 : SYS 58260. This will display the usual opening message, but there is almost 64k free.

■ Joshua also tells us about the shifted-space in the directory trick.

"If a program you write requires a SYS call after being loaded, type: SAVE "0:FILENAME [SHIFT-SPACE] system number",8. SHIFT-SPACE refers to holding down the shift key as you press space. If you now check the directory you should see something like:

66 "PROGRAM A" 38154 PRG

From this it's easy to remember the address to SYS to."

That's about all there is this month. Keep in mind that if writing to me I'm happy to give personal replies, but I'm even happier if you include a stamped, self-addressed envelope (keep in mind that I pay for postage out of my own pocket!). Also, write instead of telephoning me if possible, because I don't always have the information you need sitting right in front of me. If you have tips, tricks, questions or suggestions you can drop me a line care of the ACAR, PO Box 288, Gladesville, 2111. ❑

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C64 Sound & Graphics

by Greg Perry

Sprite Colours

We have not yet set a sprite colour, but instead have used the default colour. The single colour for a sprite in high resolution mode is individually set for each sprite in its sprite colour registers using normal C64 colour pokes.

POKE V+39+SN, colour of 0-15

For example, to set sprite 2 to colour [CYN] POKE V+39+3,3, and to set sprite 5 to colour [BLK] POKE V+39+5,0.

Exercise Number 5

Note: All the following exercises can be done with program lines as shown, or by directly entering the correct POKEs followed by RETURN.

1. change the colour of your sprite 0 to cyan (colour value 3) with
   220 POKE V+39,3
   (RUN program again)
2. Try the different colours and see which give a good match for the current screen colours. For example, instead of a single line 180, add the following lines to progress through all the colours:

```
220 FOR C=0 TO 15
230 POKE V+39, C
240 FOR K=1 TO 1000: NEXT: REM WAIT
250 NEXT
```

Expanding sprite images

The sprite pattern is normally displayed on the screen as 24 X 21 pixels. However, the VIC II can also display the image with either or both of these dimensions doubled. This is done by setting the bit 7-0 in either the X or Y expansion registers corresponding to the sprite number.

Expand sprite by 2 horizontally (X direction)

Expand POKE V+29, PEEK (V+29) OR (2^SN) (set bit to 1)

Normal POKE V+29, PEEK (V+29) AND (255-2^SN) (set bit to 0)

For example, to X expand the following sprites

sprite 2 POKE V+29,PEEK (V+29) OR 4

sprites 2, 4 POKE V+29,PEEK (V+29) OR (4+16)

and to reset sprite 2 to normal

POKE V+29, PEEK (V+29) AND (255-4) Expand Sprite by 2 vertically (Y direction)

Expand POKE V+23, PEEK (V+23) OR (2^SN)

Normal POKE V+23, PEEK(V+23) AND(255-2^SN)

For example, to Y expand sprite 2

POKE V+23,PEEK (V+223) OR 4

Obviously, if only one sprite is in use, the ANDs and ORs need not be used. Simply POKE the register with 2^SN to set the bit, and zero to clear the bit. The same applies for more than one sprite once you understand the correct numbers.

Exercise Number 6

1. expand our sprite 0 in X direction by POKE V+29,1 and contract to normal with POKE V+29,0.

```
260 POKE V+29,1
270 FOR K=1 TO 1000: NEXT
280 POKE V+29,0
```

2. expand sprite 0 in Y by POKE V+23,1 and contract with POKE V+23,0

```
290 POKE V+23,1
300 FOR K=1 TO 1000: NEXT
310 POKE V+23,0
```

Sprite-Background Priority

Whether the sprite image appears in front of or behind the current screen image is set in the sprite-background register. This is normally set to favour the sprite but is changed by setting the bit 7-0 corresponding to the sprite number.

To set background priority (bit = 1)

POKE V+27,PEEK (V+27) OR 2^SN

To set sprite priority (bit = 0)

POKE V+27,PEEK (V+27) AND (255-2^SN)

Exercise number 7

1. Set background to have priority over sprite 0 by directly entering
   POKE V+27,1
   Now LIST the program to see of sprite is "under" or "above" the screen characters.
2. Reset for sprite priority by
   POKE V+27,0

More on Screen Positions

Since sprites are bit-mapped images, the normal screen of 40 columns by 25 lines is defined by its bit coordinates. With each column being eight bits (pixels) wide and each line eight bits high, the total screen area is 320 bits wide by 200 bits high.

Theoretically, the range of X is 0-511, and the range of Y is 0-255. However not all these positions are on the screen. The boundary within which a sprite will be fully visible (the visible viewing area) is defined by the X and Y coordinates in Figure 1.

Obviously, if the sprite is given coordinates outside these it will not be fully displayed, if at all. The off-screen values allow you to move the sprite on or off the visible viewing area smoothly.

Since a non-expanded sprite is dis-

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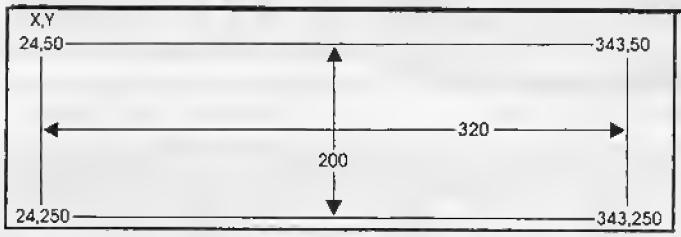

Figure 1

played as an image of 24 pixels wide by 21 pixels high, and the sprite position is referenced to its top left-hand corner, the image will only be fully visible on the screen if placed at least 24 pixels from the right-hand side and at least 21 pixels from the bottom of this visible viewing area. Sprites expanded in the X direction are displayed as 48 pixels wide and when expanded in Y are displayed as 42 pixels deep. The corresponding adjustments must be made.

By superimposing a 24 by 21 rectangle on the screen above, it is easy to calculate that for non-expanded sprites, the fully visible ranges are when X is greater than or equal to 24, but less than or equal to 320, and Y is greater than or equal to 50, but less than or equal to 229, as represented by

24>= X =<320
50>= Y =<229

and for expanded sprites, the fully visible ranges are reduced to

24>= X =<296
50>= Y =<208

If you wish to bounce a sprite around the screen, as we will do later, it is only necessary to keep the sprite within these limits.

Horizontal positioning

The X axis positioning is complicated by the fact that the allowable range is 0-511, the visible range is 0-343, but no single byte can contain a number greater than 255. How is this overcome?

If the X position is greater than 255, it actually requires nine bits to store the number. In a nine-bit number, the ninth bit has the value 2^8 or 256. This ninth bit is stored in the second X register called the X Most Significant Bit register, a single register which keeps track of the ninth bits of all the eight sprite X positions. Each sprite is allocated a bit in this register from bit 7-0 corresponding to the sprite number. If the X position is less than 256 then this bit should be cleared (set to 0), but, when the X position is greater than 255, this ninth bit must be set (to 1) and the X value adjusted by 256.

Extra care must be taken with this register if more than one sprite is in use, because the MSB register must be set for the particular sprite of interest without changing the corresponding bits for the other sprites.

In practice, if you keep the X value less than 255, you can ignore this register, but if you wish to use the full range of X values, you must ensure that the MSB register is cleared when not in use by setting the corresponding bit to 0.

Let's look at a number of cases to see the most efficient method of dealing with each situation. (The Y position is set as above.)

Case 1: any number of sprites, X<255

In using sprites where the X coordinate is always less than 255, the sprite position is set simply by

Register To Use
Sprite X Position POKE V+SN*2, X

Case 2: one sprite, full range of X

To use the full range of X values with one sprite only, the MSB register must be set only when X>255.

This is usually done with IF statements to check whether X>255 and then setting the resulting values by

IF X>255 THEN POKE
V+16,2^SN:POKE V+SN*2,X-256
IF X<256 THEN POKE
V+SN*2,X:POKE V+16,0

It appears to be slightly better to set the MSB register first if moving right and vice versa when moving left. This helps eliminate the "echo" image which may appear in the time between setting both registers. Try it both ways and see what happens. Alternatively, to eliminate any possibility of an "echo", turn the sprite image off, move the sprite to the new position, then turn the sprite on again.

Another slightly more elegant method is to use the C64's logical operators to do the full job with the following two lines:

POKE V+SN*2, X+256*(X>255)

(This expression will POKE a value of X-256 when X is greater than 255.)

POKE V+16, 2^SN+2^SN*(X<256)

(This expression will poke a value of 2^SN only when X>256, otherwise a value of 0.)

Case 3: several sprites, full range of X

If more than one sprite is in use, the MSB register for a particular sprite must be set by

POKE V+16,PEEK (V+16) OR 2^SN

and cleared by

POKE V+16, PEEK (V+16) AND (255-2^SN)

This ensures that only the correct bit for the desired sprite is set and the others are not altered. The IF statement in Case 2 should be altered to reflect these changes.

Demonstration of positioning

The following program displays a sprite consisting of a rectangle defining the sprite boundary and an arrow pointing to the sprite X and Y coordinate at the top left of the rectangle. When run, the actual X and Y coordinates are printed on the top of the screen. The sprite can be readily moved about the screen by connecting either of the two joysticks (fire button to expand) or using the following:

Movement	Key
up	1
down	left arrow
left	CTRL
right	2
expand sprite	space bar

```
Program: ARROW
10 REM  (C) Greg Perry, Brisbane 1984
100 REM SPRITE POSITIONING DEMO
110 REM POKE DATA INTO MEMORY
120 FOR I=0 TO 63: READ N: POKE
832+I,N: NEXT
130 REM SET SPRITE POINTERS
140 POKE 2040,13
150 V=53248
160 REM TURN ON SPRITE
170 POKE V+21,1
180 REM DISPLAY SPRITE ON
SCREEN
190 X=100:Y=100: POKE V,X: POKE
V+1,Y
200 REM READ JOYSTICKS OR KEYS
210 JOY=PEEK (56321)-128: IF
JOY=127 THEN JOY=PEEK (56320)
220 REM FIRE BUTTON
230 IF JOY<>111 THEN
240 231 POKE V+23,( PEEK (V+23)+1)
AND 255: POKE V+29,( PEEK (V+29)+
  1) AND 255 240 REM  MOVEMENT
250 IF JOY=123 THEN X=X-2
260 IF JOY=122 THEN X=X-2:Y=Y-2
270 IF JOY=121 THEN X=X-2:Y=Y+2
280 IF JOY=119 THEN X=X+2
290 IF JOY=118 THEN X=X+2:Y=Y-2
300 IF JOY=117 THEN X=X+2:Y=Y+2
310 IF JOY=126 THEN Y=Y-2
320 IF JOY=125 THEN Y=Y+2
330 REM  MOVE SPRITE ON SCREEN
340 PRINT "[CLR,SPACE]X[SPACE]=
[SPACE]"X;"[SPACE]Y    [SPACE]=
[SPACE]";Y
350 IF Y>255 THEN Y=0
360 IF Y<0 THEN Y=255
370 POKE V+1,Y: REM  MOVE SPRITE
LEFT TO RIGHT
380 IF X>345 THEN X=0
390 IF X<0 THEN X=345
400 POKE V+16,1+1*(X<256): POKE
V,X+256*(X>255): GOTO 210
410 REM  SPRITE DATA
420 DATA
255,255,255,255,192,1,240,0,1,248
430 DATA 0,1,220,0,1,206,0,1,199,0
440 DATA
1,195,128,1,193,192,1,192,224,1
450 DATA
128,112,1,128,56,1,128,28,1,128
460 DATA 14,1,128,7,1,128,3,129,128,1
470 DATA 193,128,0,1,128,0,1,128,0,1
480 DATA 255,255,255,0
```

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PRODUCTS

Phil Campbell's MEGA Entertainment

All the latest news from the world of Entertainment...

New titles from Pactronics

Watch out for these brand new titles from Pactronics. There's *International Ice Hockey*, complete with a full time commentator, two player option and great graphics. *Vector Championship Run* is a real time 3-D vector car racing game, said to be better than *Indianapolis 500*. If you like football manager style games, try *World Soccer* - for extra interest you get cartoon style animations showing match highlights.

Edd the Duck is a cutesy platform style game similar to *Rainbow Islands* - make sure you avoid the evil argle-frogs! *Blinkey's Scarey School* is cute too, featuring *Cauldron* style arcade action. *Jockey Wilson's Darts Challenge* is very popular in the Pactronics warehouse, and it doesn't even leave holes in the wall. Very nice graphics, too. Finally, *Ninja Rabbit* is a cutesy beat-em-up ninja game of the *Street Fighter* ilk. Something for every taste, so stay tuned for further details next month.

AMOS club passes English membership

It's official - the Aussie AMOS user group has now got more members than the English club. The Poms have got around 1200 members, the Aussie group has now made it to 1400! Hot stuff. That makes the AMOS group one of the biggest special interest computer clubs in Australia.

Version 1.23 of AMOS is now available for club members only - so if you've been wanting to open an interlace mode screen, improve your file handling or auto-detect PAL and NTSC modes, make sure you get a copy now!

Questor score coup of the year

In a brilliant strategic move, Questor have scored distribution rights for the Psygnosis label. Great timing - Mindscape, previous Psygnosis distributors, did a great job promoting *Lemmings*, arguably the game of the year. Now Questor can sit back and soak up the sales! Ah well, it's a jungle out there.

Lemmings give-away

Wow! Here's a great offer... to celebrate the great Questor *Lemmings* takeover, we've got an ultra-exclusive Lemmings tie-pin to give away. Featuring a full colour enamelled floater, this is clearly the fashion accessory of the decade. Naturally, you don't have to wear it as a tie-pin (after all, who wears ties these days?) - it's equally at home as a lapel-pin, a brooch, a badge or stuck on your hat. A multi-purpose Lemming.

For your chance to win, just write to LEMMING GIVE-AWAY, c/o Phil Campbell, PO Box 23 Maclean NSW 2463 with a note telling me what you like best about the Entertainment Section, and what you think needs to improve. Entries close at the end of the month.

Pactronics blank disk deal

Everyone needs blank disks. Now Pactronics have come up with a great new idea - buy a pack of 10 blank disks,

MINDSCAPE COMPETITION

T U R R I C A N I I

Along with a goodbye to Craig, it's Hi to Richard Treloggen as he takes over the Mindscape Competition hotseat.

This month Mindscape are giving away three copies of the Amiga-version of *Turrican II*, worthy successor to one of the most popular shoot-em-ups ever.

This game is hot! Watch for a full review next month.

In the meantime, sharpen your poetic skills and pen a quick poem in praise of Mindscape's Richard - really butter him up to convince him that competitions like this are a great idea!

Only one other rule - the word *Turrican* has to appear in the poem as well.

Send your entries to Mindscape competition, c/o Phil Campbell, PO Box 23, MacLean NSW 2463 to arrive by the end of July.

and you'll find one of them contains a full-scale game! *Archipelagos* and *Star Ray* are the two titles on offer - both classy games, if a bit long in the tooth. Top idea, and no more expensive than a standard box of blanks!

Countdown to CD-TV launch

Yes folks, it's here. The amazing CD-TV, alive and well at the World of Commodore Show. If you're a Sydney reader, make sure you get to the show - machines will be available in the shops soon after. As for software, well, it's coming. Sort of. But Commodore will need to liaise a little more closely with key software distributors to ensure a steady supply. Watch out for more news and info on the CD-TV in these pages soon.

ACAR hints disk offer

Don't forget you can order an Amiga disk containing text files of all our hints and tips from the last two years. It's packed with good ideas, but you'll need a standard Amiga wordprocessor to read them. To get your copy, send a blank disk, stamped, self addressed envelope and a cheque for $5.00 (payable to Phil Campbell) to Phil Campbell, PO Box 23, Maclean NSW 2463.

Goodbye, Craig!

One of the enduring identities in the entertainment software business has jumped ship. Mindscape's Craig Kingshott, the guy behind our monthly Mindscape Competitions, has left Mindscape to join Dick Smith Electronics. All the best for the future, Craig!

Mindscape May winners

Five readers have won themselves a copy of *SWIV*. The overall winner was ANDREW COOPER of Picnic Point NSW, with a grand tally of 147 words. Andrew wins a copy of the Amiga version of *SWIV*, as do CHRIS TAN, of West Ryde, NSW, and M.N. QUAN, of Mt Prichards, NSW, and YVONNE CHANDLER, of Griffith, NSW. A copy of the C-64 version goes to ALLAN WRIGHT, of North Rockhampton, Qld. Congratulations, and thanks to Mindscape for the prizes. ❑

Entertainment Letters

Send your letters on any Entertainment issues to Phil Campbell, PO Box 23 Maclean NSW 2463, or fax them on 066 452060. If you keep your comments brief and to the point you'll be much more likely to see them in print!

Cheat not prospering

Dear Phil, Firstly, congratulations on the great mag at such a cheap price: much more value than CU, which is nearly three times the price. I have a few problems I hope you can solve. I have seen a cheat for *Bomber* (Amiga) that says to type BUCKAROO then a space. I've tried it many times, but all it does is say "BUCKAROO, WHAT DOES THIS MEAN?" Please help!

Second, does anyone out there know how to cross the poison river in *Kings Quest* (Amiga), or how to get the key?

Finally, to all low budget game buyers - at Parklea Markets near Blacktown (NSW) I saw games such as *X-Out*, *Turrican I* and *II*, Test Drive and *Conqueror* (which I bought) and other highly rated games selling for about $30 to $40. It's certainly worth a look.

Kristian Adamson
Springwood NSW

Ed: *Thanks for the tip on the cheap games, Kristian. We'll put out an APB (that's police jive talk for All Points Bulletin, whatever that means) for info on* Bomber *and* Kings Quest. *Can anyone help?* (There are clues for *Kings Quest III* and *IV* in the *Official Adventurers Realm Hint Book*, $9 from newsagents).

Winging to fame

Dear Phil, First, I'd like to say ACAR and its entertainment sections are both excellent. Secondly, I'd like to pass on some *Wings* statistics which I have gathered through World War I.

Lt Colonel Andrew "Burner" Gormly has survived the entire war (somehow!) and therefore has flown all 243 missions. Unlike Andrew "Ace" Skurrie, he has been downed only 6 times, and he has had no reprimands. He's been victorious with:- Dogfights 137/150; Bombing 60/60; Strafing 24/33; Monoplanes 87; Biplanes 217; Triplanes 66. This brings a total of 317 confirmed kills - slightly more than the Red Baron, Lt Colonel Miller, and Lt Colonel Skurrie. I received my VC after my first solo flight when I encountered nine DIIs - shot down eight of them before my guns jammed, so I rammed the ninth.

It would seem appropriate for me to second Andrew's comments about *Wings* - it's a brilliant game, and I'd recommend it to anyone.

Andrew Gormley,
Walkerville SA

Disk whining

Dear Phil, I have a major gripe - not with the magazine, but with all the software companies that have "Save" facilities on their games. The trouble is, they all seem to use a different format for the save disks, so I have to use a different blank disk for each one. Why can't they all use the same format so I can use a single disk instead of the six nearly empty ones I'm forced to use at the moment?

Peter Cain
Warnambool VIC

Ed: *A very good point, Peter, and I'm glad you asked! So what about it, game programmers? There are heaps of guys like Peter who have to scrape together their loose change to be able to afford all those blank disks, and soon they won't be able to afford to buy software!*

Ports of Call

Andrew Gormley of Walkerville SA says Steven McKinlay should disregard Maverick's comments about rescues-at-sea. Maverick said if you find survivors floating on a raft, just ignore them and they'll go away - the Keating approach.

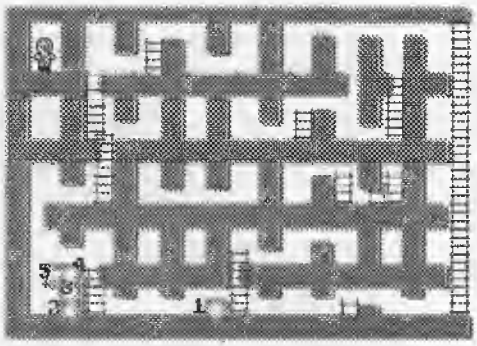
However, Andrew warns that if you do this you'll miss out on important status points - if you ram the little guys

your status will drop by 1, while if you save them it will climb by up to 2 points. So how do you do it? Easy, says Andrew. First, you'll need one of the biggest ships. You'll need to line it up and STOP IT MOVING so the raft will gently float into the white bridge section. Make sure that the length of your ship's bridge is longer than the raft, because both corners of the raft must make contact with the ship at the same time - so your ship must also be dead straight!

Championship Lode Runner

Help is at hand for Norman Vernon! Chris Sims and her husband are experts, and they send this advice:- "Collect lodes leaving the three in the bottom left hand corner until last. NEVER isolate your man from the ladder in the middle of the bottom level. I'll call the brick block beside this ladder No.1 - on the left is a ladder with three blocks going up beside it (No. 2, 3 and 4 respectively) and a block overhanging a lode (No. 5). Got that? Good. Dig No.1, then go left to collect the first two lodes, then return to the middle ladder. When No. 1 reforms, dig No.1 then go left and up the ladder and dig No4 and 3, then return to the middle ladder. As soon as No1 reforms, dig No 1 the go left and dig No 2 then up the ladder and dig No 5, jump through to get the lode and return to the middle ladder before No 1 reforms. See? Simple!"

If you think that's confusing, says Chris, wait till you see the rabbit in level 24! One hint for this - sometimes slowing down is the best way to dig faster. And if you don't understand that, says Chris, then you haven't explored the positive and negative aspects of the game! Sounds cryptic.



Capone

Peter Cain sent a bunch of handy tips, the first a very neat tip for *Capone*. For invincibility, just shoot the top of the flag pole twice in front of the post office. Shoot it again and you'll see a screen of programmers. Shoot it again and you'll be invincible, and standing in the bank. At the end of that round you'll start at the beginning with warp speed!

Dungeon Master

Also from Peter Cain come a number of undocumented spells for *Dungeon Master*. First, says Peter, to see someone interesting, face the entrance and cast the spell OH EW RA. To advance your Ninjas, simply have them stand in a hall and throw weapons - retreive them and repeat. Magic Users can do likewise by casting spells in the air, and fighters can just slash at an empty space. Other spells are YA BRO ROS, to leave a trail of footprints, VI BRO, for a shield against poison, DES ER SAR, for darkness, FUL BRO NETA for a fireball shield, OH KATH RA for a lightning bolt, ZO to open doors and DES EW to weaken the undead.

Lemmings help wanted

David McKinney was one of the lucky winners of our Lemmings competition - but now he's not so lucky. He's stuck at MAYHEM LEVEL 20, password MIGIKOOOIQ, and can't get through. "If only I had one more bridge," says David. Can anyone help?

IMMORTALITY
C-64 HINTS & TIPS

by Damian Caynes

Good to see I'm finally getting some response from the readership! I'll do my best to reply to every letter I get as long as its accompanied by an SAE, and tips for this column are most appreciated. Ok, here's a plethora of handy non-cartridge tips from a man who needs no introduction... Well, I suppose he does need one actually... COBRA!!!

Psychastria

If you are sick to death of dying (?) on this unashamed *Uridium* clone, try holding down the keys I L T and D. You should now be prompted with "ENTER CHEAT CODE" type "THE VOICE" and become endowed with invincibility.

Mach

To gain an improved ship, get a high score and type "STARVISION-IQ" instead of your name.

Future Knight

Hmmm, you may have to grow an extra arm for this 'un.

Hold down the keys B U G 8 7 for unlimited knights, or 4 7 9 E U J M will change the title screen and border colours to grey and 'FUTURECHEATS' should be displayed instead of 'FUTUREKNIGHTS'. This, surprisingly enough, enables cheat mode.

Iridis Alpha

At last, a cheat for this wonderful psychedelic C64 trip, uh, game from Jeff Minter and his yak!

When the game begins, press F1 to get into another game. Now use the M and N keys to play it. If you want something different, try pressing *...

Cybernoid

This game was state-of-the-art a few years back, and I think it's still impressive! To get unlimited Cybernoids, select redefine keys and change the keys to Y X E S (that's the S word backwards, kiddies!).

108

Ho hum, another dart game simulator...

Well, if you want a nine dart finish, hold down the right SHIFT and SPACEBAR.

Firetrack

To get into Atari VCS mode (???), press right SHIFT, SPACEBAR and left arrow keys. Now pressing left arrow, 9 and SPACEBAR will fast forward to the last level!

BMX Kidz

Remember the BMX craze so many years ago? This was a hell spawn from that, methinks...

While on the title screen type "VIVALDI", now press any key from A-F to select a level.

Great bargains for your C64/128!

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Sim City

Here's a nifty little cheat from Andrew Foster of North Rocks for this below average C64 version of an amazing game.

When you have less than $4000 in cash, press F1. This will bring your funds up to $4000 but if you have more than $4000 DON'T do this, it will reduce your funds all the way back to $4000!

Gee, I wish that worked with the autoteller...

Wizball

Non-reset pokes seem to be everybody's fave, and here's some more from Philip Mayer. Just a quick word beforehand though. Any pokes I print without SYS numbers CANNOT be restarted after a reset! The reason for this is that some of the computer's memory is cleared upon reset. So, any pokes that have no SYS number must be entered with a cartridge such as the Action Replay MK VI. Geddit, Philip?!?

Ok, back to the tips...

To become invulnerable, type "WIZBORE" twice on the title screen...

Midnight Resistance

And what a terrific conversion the guys at Special FX came up with 'ere, eh? If you're a cheat, type "SIAMESE" on the title screen.

Ghouls 'N' Ghosts

As I've said before, this really isn't as good as the prequel!

Did you know that on the Amiga the two games were released by different companies? Strange, but true...

Get a high score and type in "WIGAN RLFC". You can now press A to get your armour back or S to skip to the next level...

Well folks, that ends another month of penultimate pokes 'n' tintillating tips! If you have any views on the mag, how much I get paid, or just some tips, get 'em to the Slarterer at:-

Slartibartfast,
4 O'Connor Drive,
Bray Park,
NSW 2484.

PHIL CAMPBELL is not usually an adventure fan. But in this case he's prepared to make an exception...

Wonderland

It's hard to stay awake in the sun, especially when you're sitting by a river that flows past with a lazy, hypnotic gurgle. Yawning, I rub my eyes. Maybe I should take a stroll. To the Southwest, I can just see the beginnings of a winding country lane, while to the east lies a grove of pear trees.

I go east. The pear trees are beautiful, and the fruit hangs within easy reach. As my fingers close around the firm flesh of a pear, I'm startled by a rushing white rabbit. Nothing strange about that, except this rabbit is talking to himself, moaning in a clear but rabbitty voice, "Oh the Duchess, the Duchess! Oh! Won't she be savage if I've kept her waiting."

It's been a long time since I've seen an animal talk. Not since "Mr Ed." So I feel compelled to follow. Over the fence, up the lane, into a field, headfirst into the burrow, then down, down, down - down into a strange new world of talking animals, playing-card guards and cat-less grins. Welcome to *Wonderland!*

You guessed it. I'm Alice. After a mere 126 years Lewis Carroll's literary masterpiece has finally been made into a computer game. And what a game!

Wonderland is best described as an "adventure game" - a textual maze of locations to be explored, puzzles to be solved and dangers to be avoided. Commands are entered from the keyboard, and responses appear on the screen. Yep - been there, done that. To tell you the truth, the sad fact is that almost every adventure game I have ever played has driven me to distraction.

But *Wonderland* is different. In fact, *Wonderland* is a shining example of the state-of-the-art, an adventure for non-adventurers and seasoned players alike.

For a start, *Wonderland* is very forgiving. Older adventure games were more pedantic than an angry wife. Hence, when I find a bottle on the glass table with "DRINK ME" inscribed on the label, I simply type "Drink potion". Some games would refuse to respond - after all, I didn't say "Remove Lid." But *Wonderland* simply removes the lid for me, with the response "You removed the lid first. You get smaller." For adventurers like me, that avoids about an hour of frustration.

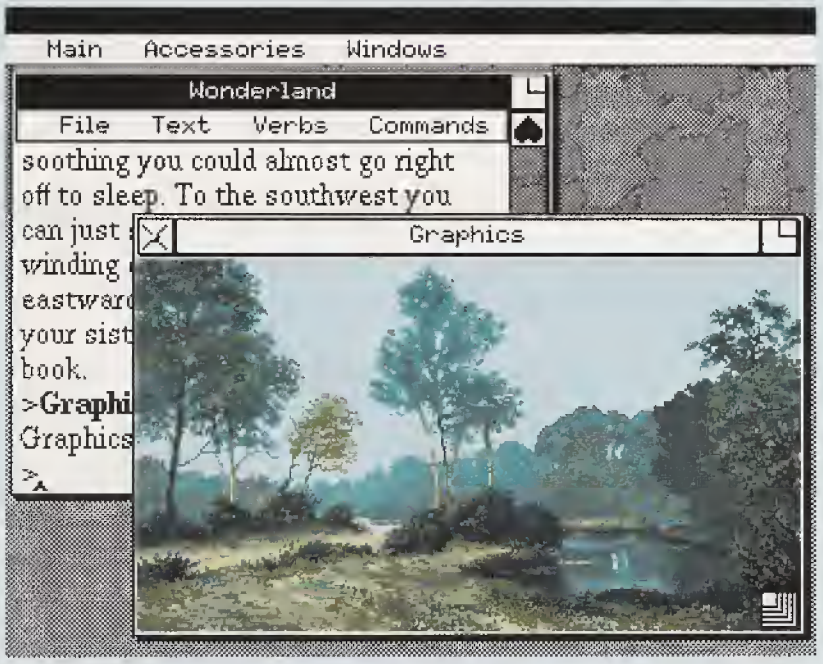
Then there's mapping. Remember the little scraps of paper littering the room last time you played an adventure? The manual always insists that making a map is essential - and so it is. It's important here too - but *Wonderland* does it for you. The game is entirely self-mapping. Even better, if you want to find your way back to somewhere you've already been, simply point and click on the map and the system will automatically retrace your steps.

The intelligent "Help" system is a bonus for average adventurers too. If you're stuck - really stuck - then you can ask for hints.

Naturally, though, too much help all at once takes the challenge out of the game, so *Wonderland* offers tips in a number of gentle stages.

Wonderland runs on Amiga, IBM and Atari ST computers. In all versions, the game uses its own custom built windows-style interface called Magnetic Windows. Its beautifully crafted, and lets you open the map window, hints window, main text window and a graphics window all at once. You can re-size them and position them however you like, and use a variety of fonts. The graphics window gives a postcard size view of your location, with delightful William Turner style landscapes that really sparkle from the screen.

Overall, the effect is beautiful - and thats a good description of the whole game. *Wonderland* is a classic yarn presented with real style!



Distributed by:
Mindscape
(02 899 2277),
RRP Amiga $79.95

Ratings:

Graphics:	94%
Sound:	64%
Gameplay:	87%
Overall:	**89%**

Come fly with me, says PHIL CAMPBELL, as he puts the newest flight-sim through its paces...

ProFlight

Sick to death of wimpy flight-sims with pretty graphics and not much else? Snails-pace action that lets you examine every speck of the lanscape in minute detail, because there's nothing better to do? Yeah, me too.

ProFlight is the absolute reverse. Here's a game that really means business - the PRO in the title means PROfessional, and it's no empty boast. Start with the training manual. Ring bound, 190 pages, and crammed with technical details - everything you need to know to fly a simulated Panavia Tornado.

At ground level, the Tornado is the fastest aircraft in the world, and it can climb to 30000ft in less than two minutes.

In keeping with the professional approach, *ProFlight* simulates every conceivable detail. This is the only game - sorry, simulation - produced by HiSoft, a company better known for high-brow software like "C-language compilers with improved ANSI compliance and Global Optimisation." Heavy stuff. So it's really no surprise that *ProFlight* means business. That means the program simulates features like the air drag of your landing gear. And naturally, the effects of your tailerons, elevators and rudder are precisely calculated for every angle of pitch, roll and yaw. But the real question is, what's it like to fly?

Well, I've just been for a test flight, and the answer is - fun. In spite of all the high tech wizardry, flying the Tornado is fast and furious. A "Quick Start" guide in the manual tells you everything you need to know about setting the "way-points" for your destination, powering up and taking off. Okay, I'll admit it - this time I took off on auto-pilot, which is fine if your first waypoint is set directly in front of the runway. Once in the air, control is delicate. The manual recommends using the mouse as a pretend control-yoke, as it's better for delicate manoeuvres.

So, a few quick loops, and then it was back to the airbase for my first landing. I didn't do too badly, either, except that I forgot to lower the landing gear.

As usual, *ProFlight* provides you with plenty of combat experience. You've got a Mauser Cannon, four Sidewinder missiles, four Sky-Flash missiles and two auto-release bombs. In keeping with the rest of the game, this is a realistic payload - not enough to go rampaging, but sufficient for a well planned mission.

As you'd expect, the down-side of *ProFlight* is the graphics. As usual, there's a trade off between screen detail and number-crunching. The more co-ordinates you have to plot on the screen, the longer it takes. And the slower the action. Programmer Nick Brown doesn't hide the fact that he aimed for accuracy and speed - and that means reduced ground detail.

That doesn't mean the screen is a mess by any means. The world outside is simple and neat, and you blast across the terrain with enough speed to make the trade-off seem worthwhile. In fact, there's even an option to reduce the scenery to a wireframe view for even faster action.

Importantly, sound effects are top class. You don't feel the power until you can hear it, and in this case there's plenty. All in all, *ProFlight* is a satisfying sim - especially if you've got an eye for detail and the thirst for a challenge. ❑

Ratings:
Graphics: 72%
Sound: 84%
Gameplay: 82%
Overall: 81%

Distributed by:
Pactronics
(02) 748 4700

ANDY PHANG has been very patient. After all, the Amiga version of Bard's Tale III has been a long time coming. But was it worth the wait?

Bards Tale III

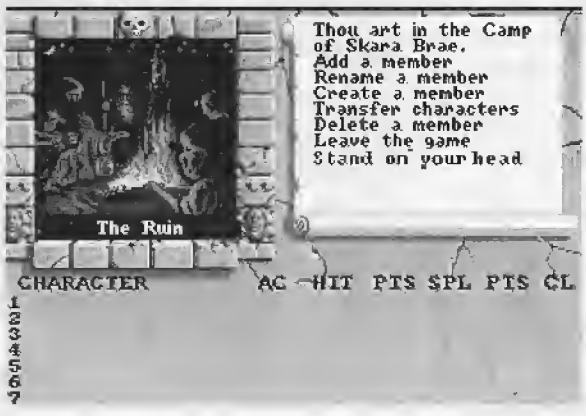
It has taken over three years for Electronic Arts to convert the third chapter of its hit role-playing series *The Bard's Tale* for the Amiga. Subtitled *Thief of Fate*, adventurers throughout the realm are once more summoned into battle, this time against the Mad God Tarjan. Apparently your efforts in destroying Tarjan's disciple, Mangar (back in *Bard's Tale I*) did not please His Mighty Nastiness, and in revenge Tarjan completely annihilated your beloved home town, Skara Brae. Not even the local Bank (with all the gold accumulated from your past encounters) was spared. This time, Tarjan has gone too far...

I've been waiting for *Bard's Tale III* to appear for my Amiga ever since the C64 version was released many moons ago. You can't imagine my joy when I finally had a copy in my hands: YES, it's finally out! My hands shook as I inserted Disk One into the drive. After all this time, can Electronic Arts (which has always produced excellent Amiga versions of its products) do it one more time?

The answer, I'm sad to say, is no. Not that the game itself isn't good, it's just that the Amiga CONVERSION of *Bard's Tale III* leaves a lot to be desired. Firstly, the graphics are way BELOW the standards set in the original Amiga incarnations of the first and second *Bard's Tale*. Electronic Arts has only used 16 colours, which makes *Thief of Fate* look extremely out of date in comparison to the brilliant graphics of *Legend of Faerghail*, another role playing game (RPG) using a similar 3D interface.

I believe that the Amiga version was ported directly from the IBM version (released some months ago), and as the IBM version only supported 16 colour EGA mode, you can draw your own conclusions.

Control of your party is via the mouse and/or keyboard, and most *Bard's Tale* veterans will find many aspects of the game similar to its two predecessors. Fortunately the monsters are much easier to defeat in *Thief of Fate* (at least, during the early stages) and your party will be able to advance in levels at a healthy rate. It is advisable to transfer your characters across from previous games, because they will start off with an enormous advantage in abilities and items. Remember to change one of your Archmages into a Chronomancer BEFORE exploring the Mad God's Temple. Once you kill Brilhasti (somewhere in Level 4), you can advance your Level 1 Chronomancer straight to Level 7 because you will be given nearly 12 million experience points for winning the battle!



Sound effects are sparse, and the famous "Gregorian Chant" when visiting Temples in *Bard's Tale I* is also missing. Music is limited to the title screen but pleasantly done, and your Bard can strum a little song or two at any time.

I have a serious gripe with the method used to cast spells in the game. As *Thief of Fate* is combat intensive, it surely must have been wiser to implement a quick and easy to use spellcasting system. To their credit, Electronic Arts has tried to do that by using either the mouse or arrow keys to scroll down a list of spells, and then choosing the correct spell for the occasion (whereas in previous games, the player had to type out four letters corresponding to the spell they wished to cast). While this sounds fine in theory, it is extremely inefficient in practice. If you want to cast a particularly high level spell, and you happen to be an archmage with over 160 or so spells, you MUST scroll through all 160 spells before you can find the correct, high level spell.

The faults cannot lie at the feet of Interplay, who originally designed an excellent RPG with the original *Bard's Tale III*. Rather, it is Electronic Arts who must shoulder the blame for such a poor Amiga conversion of a great product. A great pity indeed.

Ratings:
Graphics: 70%
Sound: 75%
Gameplay: 85%
Overall: 75%

Distributed by:
Electronic Arts
(075) 911 388
RRP: Amiga $59.95

Feel like a bit of empire building? Now's your chance, with Kellyn Beck's epic follow-up to Defender of the Crown. PHIL CAMPBELL investigates...

CENTURION

DEFENDER OF ROME

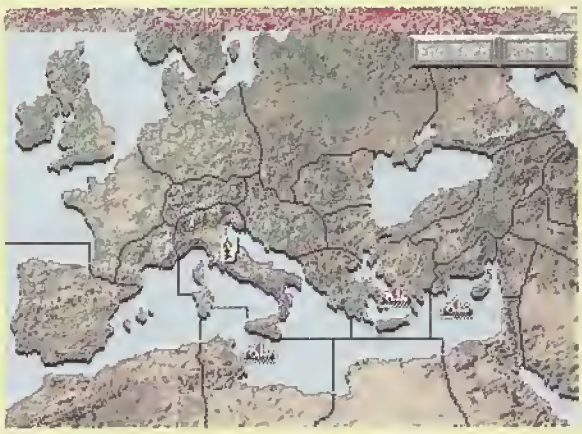
"When in Rome, do as the Romans do." Gladiate. Navigate. Negotiate. Decimate. Not very nice, I know, but for a Roman Centurion, that's life. And it certainly isn't dull.

Centurion - Defender of Rome puts you in the centre of the action. The box calls it a "cinematic adventure," a polite way of avoiding the term "interactive movie" coined by Cinemaware. Cinemaware were responsible for some great games, all drawing their inspiration from popular movie genres.

Sadly, Cinemaware have faded from the scene. But Kellyn Beck, author of the popular *Defender of the Crown*, is still going strong. With *Centurion - Defender of Rome*, Beck has signed with Electronic Arts. So now it's not an "interactive movie." It's a "Cinematic adventure." Who cares what you call it? Just tighten your toga, step into the screen and get ready for action.

You're playing the part of a small-time centurion, distinguished only by a burning ambition to control the Roman empire. At your disposal is a legion of troops and a meagre 20 talents of silver.

The screen displays a map of the empire, and as you'd expect, all roads lead to Rome. Your army is waiting for orders, camped on the banks of the Tiber. A small icon shows your position, while other symbols display the armies and ships of neighbouring provinces.



So what are you going to do? Let me suggest a quick raid on nearby Alps. Select the "Move Legions" option on your control menu, then click your destination on the map - naturally, movement is limited to immediately adjacent regions.

On reaching the mountains, you are confronted by a horde of Barbarians. Vindelic, their leader, offers a greeting. "Welcome to the mountains, great warrior." How will you respond? Will you go to war immediately? Will you "Be aggressive"? Or will you "Give an ultimatum" in the hope that Vindelic is not as tough as he looks?

Let's not mess around. Go to war. "I spit on you stinking Roman dogs. Ptooee!" says Vindelic - and the battle begins. His face fades from the screen to be replaced by a perspective view of the battle-field. As ordered, your tiny soldiers are arranged in a wedge formation near the bottom left side of the screen. The Barbarians form a line across the upper right. Give the order, and your men start to move according to your battle plan. When things start to go awry, you can redirect individual groups of soldiers to the hot spots - all in all, a very flexible, real-time battle system.

Good news. We've won. Well, to be honest we lost 1289 men against their 789. but we ended up with 2911 survivors, and they only had 2211 - all of whom ran away, living to fight another day.

Now comes the tricky bit. Politics. How much tribute will we demand from our new region? Will we try to win the allegiance of the locals, or will we bleed them dry? Will we build an amphitheatre and provide entertainment? Or will we rule with an iron fist?

There's certainly more fun to be had if you choose the first option. Like Gladiator Battles and Chariot Races, both of which demand heavy duty involvement with your joystick.

Centurion is a well balanced game, competently produced. Graphics are nice, though not quite up to the old Cinemaware standard. The Amiga music track features suitably imposing kettle drums and trumpets, and the sound effects are impressive - especially in battle. If you liked *Defender of the Crown*, this is a game that offers more of the same - a well balanced blend of action and strategy. And as you'd expect, this is a game that will provide you with a long term challenge. After all, Rome wasn't built in a day.

Ratings:

Graphics:	74%
Sound:	76%
Gameplay:	75%
Overall:	**75%**

Distributed by:
Electronic Arts
(075) 911 388
RRP Amiga $59.95

If you loved *Silkworm*, you'll drool over SWIV! PHIL CAMPBELL takes a look at a game that's more explosive than most...

SWIV

Never judge a book by its cover. Nor a computer game, for that matter. If you do, you'll probably leave *SWIV* on the shelf - and that would be a big mistake. *SWIV* is a dual purpose acronym. First, it stands for *Silkworm IV*, the state-of-the-art homing missile. Then it's an acronym for Special Weapons Interdiction Vehicles. In *SWIV*, you control the latter while avoiding the former - all of which means very little when you inspect the box in your local software supermarket. Add a garish budget-looking graphic on the front, and you've got a game with little immediate appeal.

But don't be fooled. For a start, *SWIV* is the sequel to the chart-topping *Silkworm*, one of the best Amiga shoot-'em-ups ever released - reason enough in itself to look a bit beyond the shrink wrap.

So let's get started. Ignore the title screen. It's pretty ordinary. So far it's only the eerie soundtrack that hints at the danger and excitement to come. My heart thuds a little faster as I contemplate my mission - a helicopter raid over enemy territory prickling with high tech defenses.

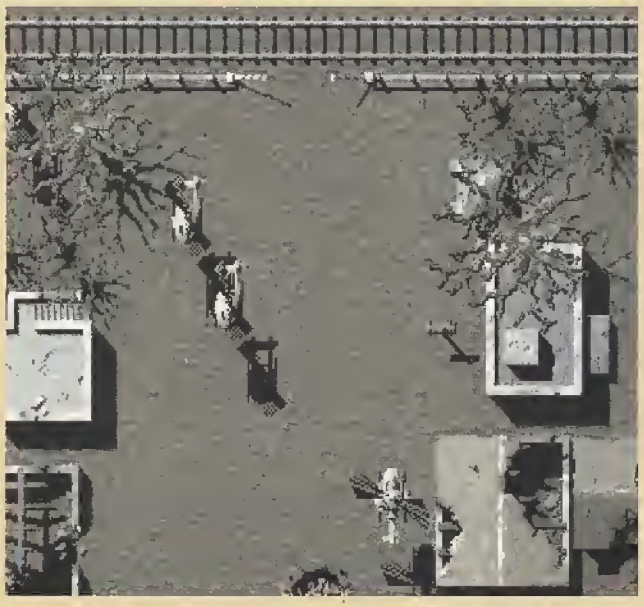
The action begins. I'm flying up the screen, directly above a derelict airfield. The pock-marked airstrips and shell-fractured hangars are surrounded by skeletal trees, long defoliated by the fires of battle. The colour palette is rich in tones of khaki, grey and silver - a sombre scene indeed, but very businesslike. After all, we're not here to play games.

Don't spend too long admiring the view. And simply ignore the feeling of depth created by the superb shadow effects. That can wait, because there's already a huge convoy of enemy choppers on their way down the screen. Naturally, they're no match for my razor sharp reflexes. One flash and they're ash. Don't pause to admire the pretty explosions either, because this is just the start - there are plenty more nasties where they came from.

While swarms of slow moving drones clutter the sky, convoy after convoy of high-speed gunships launch a blistering attack. Then there are fleets of hovering bat-wings, and huge black, anodised jets that whistle past in less than the time it takes to blink.

If they don't get the adrenalin pumping, try the battalions of tanks and the high tech gun emplacements. Or the big one. The six-part Pincer-Copter, a huge multi-pilot machine that assembles itself in the air. Believe me, this is a mean piece of gear. It hovers mid-screen, impervious to all but the best aimed shots, then darts toward you with its huge pincer-like claw. Aaargh!

Sound effects are worth a mention too. In this case, "less is more." The soundtrack is minimal. There's no upbeat music track, except in the introduction. There's no noise from your engine. Instead, everything has been poured into producing the meatiest explosion effects I've ever heard. Top stuff, especially if you're connected to a stereo amplifier and a pair of respectable speakers - get ready to shake up the neighbours.



Playing *SWIV* will leave you satisfied and exhausted. It's an edge-of-the-seat experience, fast, furious, and very addictive. This is game-of-the-year material, and an essential addition to your collection. ❑

Distributed by:
Mindscape
(02) 899 2277
RRP: Amiga $69.95
C64 disk $49.95
cassette $39.95

JURIS GRANEY puts on a cardigan and his thickest pair of spectacles to play the part of an aspiring compu-Nerd. Has he got what it takes? Find out for yourself...

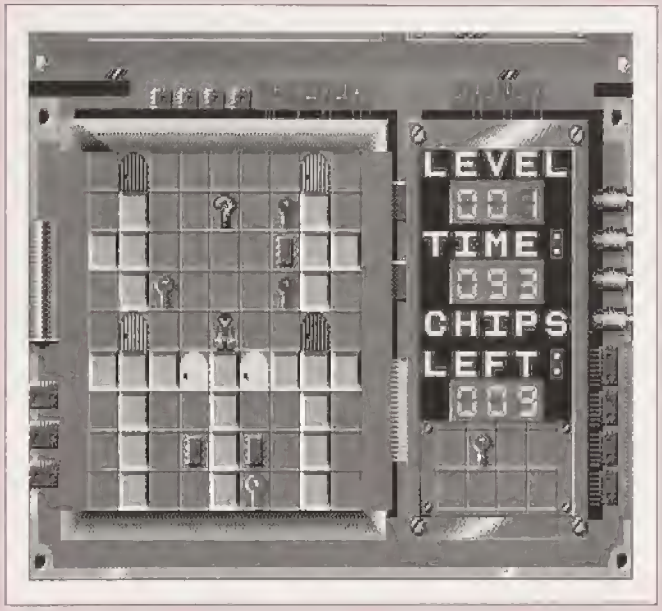
Chip's Challenge

Some of my favourite games are puzzle games. Games like *The Curse of Ra* keep me at the computer for hours on end. *Chip's Challenge* is more of the same - I've already put in plenty of hours, and had a lot of fun.

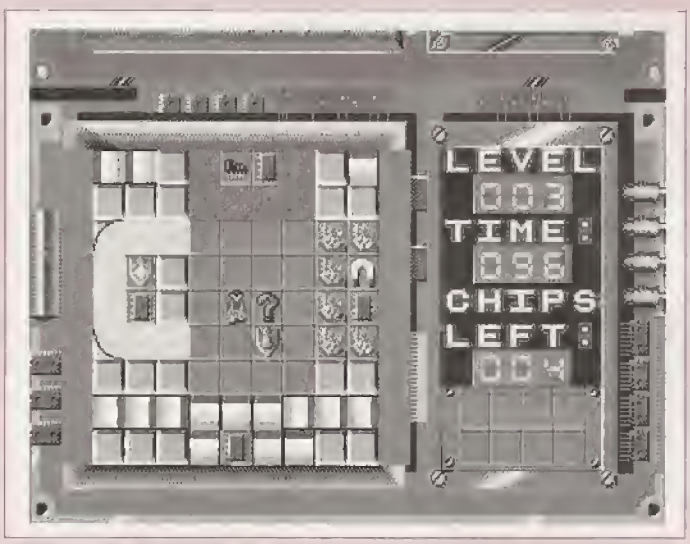
Chip is a computer nerd - at least, he wants to be. But to really make it, Chip has to be accepted into a club called The Bit Busters - an exclusive club of computer geniuses, led by Melinda the Mental Marvel. Mmmm - and Melinda's assets are more than merely mental. But before Chip can be accepted, he has to complete a task set by the Bit Busters. And that's where you come in.

You take control of Chip and have to complete 144 levels of challenging maze-like paths and puzzles. Monsters, traps and the ticking of the clock all conspire to "delete" you before the level is complete.

You must ram blocks of soil together to create bridges over water, or use them as buffers against bombs. Invisible partitions will impede your progress. Coloured keys will open doors. Tanks will shoot you, energy balls will zap you - all in a day's work for potential members of the Bit Busters.



To make it through the game successfully, you must keep puzzle sequences in your head. Generally, you'll have to complete tasks in order, setting and releasing trip buttons at precisely the right times. There are fire shields, water shields and ice-cleats to help you along, but make sure you've got them when you need them! In most levels there's a specific number of chips to collect before you can progress to the next level - sometimes easy, sometimes amost impossible.



In the package you receive a combination lock security wheel, the disk and the instructions. After reading the instructions the game seemed complicated but when I loaded it up it was really quite simple. In the first level you have to collect 11 chips in 100 seconds - easy. Placing chip on the question mark icon in the middle of the screen gives useful info on what you have to do, and sometimes - if you're lucky - how to do it.

Now onto the more negative aspects of *Chip's Challenge*. The music is awful - annoying and dull. The graphics are not bad, and like most puzzle games you look from above. There is one major problem - if there are a lot of sprites on the screen the game slows down noticeably. While I'm complaining, the graphics are far too small. I have to wear glasses when using the computer and looking at the graphics gave me headaches. My final gripe is that there's not much variation. After a while, the game seems too straightforward, with one puzzle after another after another.

At least you're given a code whenever you finish a level, so you don't have to go over old ground. So far I have got 132 codes in three days - not bad considering I only play the computer for around three hours a day.

My overall opinion of this game is that it would be good with a bit more variation. It just gets too boring after a while, but with all quirks aside I liked it and would recommend it for the younger puzzle freaks out there rather than the experienced ones. ❑

RATINGS:

Graphics:	70%
Sound:	70%
Gameplay:	68%
Overall:	69%

Distributed by:
Ozisoft
(02) 313 6444
RRP: Amiga $59.95

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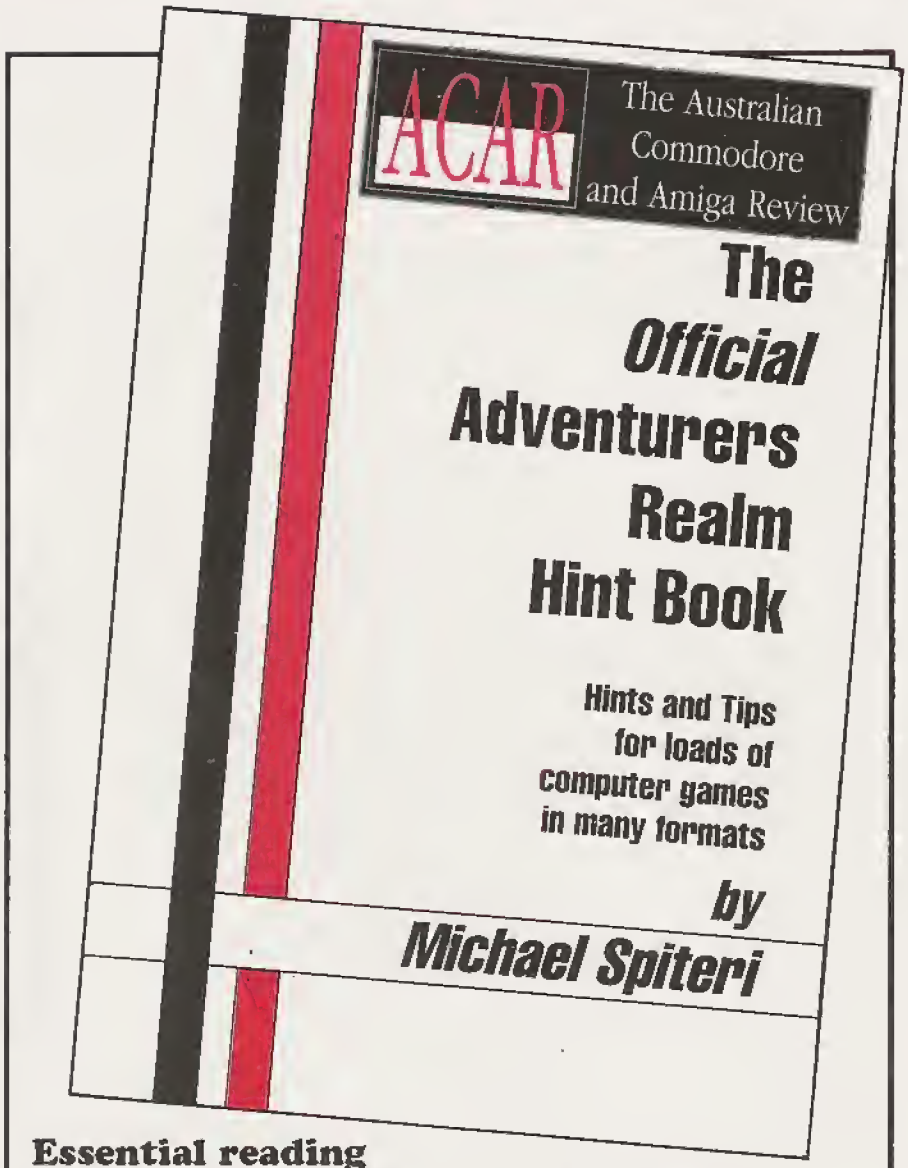

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The trouble with model train-sets is they take over your house - little tracks running everywhere. So how about something a little more compact? Like a train-set that spans a continent, yet fits inside your Amiga? PHIL CAMPBELL goes into "training" to investigate...

RAILROAD TYCOON

OVERALL 91%

Noel is a train driver from Newcastle, and for some time now he's had a terrible problem. Noel and his mates used to have a Commodore 64, and in their spare time they played a game called *North East Corridor*. It was a game about trains. More specifically, about shunting trains - just the sort of stuff they did at work. Must be great fun, because they couldn't get enough of it. Shunt trains at work, shunt them some more in *North East Corridor*.

The problem, however, was that there was nothing even remotely like *North East Corridor* available on the Amiga. Noel phoned me in desperation. "Anything," begged Noel "... anything with trains."

Well, Noel, good news at last. *Railroad Tycoon*, one of the most awarded IBM games ever released, has finally been re-programmed for the Amiga. And it's got all the trains you could ever want.

Railroad Tycoon makes you the President of a tiny nineteenth century railroad company. Those were the days when trains were really trains - steam power ruled supreme. It's up to you to build your tiny company into an empire, and earn yourself a place in history. You'll build and operate the complete system, from tracks and signals to locomotives and livestock cars - always aware of your conniving competitors, Commodore Vanderbilt, James Hill and J.P. Morgan.

There are four different areas and time periods to choose from, each covering a significant era in railroading history - North Eastern America in 1830, the American West in 1866, England in 1828, or Central Europe in 1900.

The game opens with a satellite's eye view of your chosen region. In the tutorial option I selected, it's a view of the eastern USA, complete with the Atlantic coastline. In a lower corner of the map, only just visible, is my railway track, joining the small centres of Charlottesville and Richmond.

Pull-down menus present a variety of display options. I can zoom in to an area display, local display, or a detail display. The detail display shows individual buildings, the track, and even my single 0-4-0 Grasshopper locomotive steaming back and forth. There are hundreds of other options to investigate - for example, when I make enough money I can upgrade to a more powerful locomotive like a 4-2-0 Norris. For now, though, I settle for a few extra cars - I add a mail car, a stock car and an extra passenger car to help cater for growing demand.

New tracks are next. I build a line to the timber mill a few miles east of Charlottesville station. If my entrepreneurial gamble pays off, wood from here will soon be carried to the Richmond Paper Mill for processing. And I'll be rich.

Railroad Tycoon is a huge and fascinating game. So far I've only played on the simplest level, and explored a tiny fraction of the game options - mastering the game will take months. Graphics are delightfully detailed, Amiga sound effects are excellent, and the 180 page manual is crammed full of information.

Railroad Tycoon is *Sim-City* with wheels. Huge, fascinating, and open ended, it's the perfect game for train buffs, and for anyone else who enjoys immersion in a detailed simulation.

Distributed by:
Questor
(02 662 7944)
$89.95.

ANDREW BAARTZ indulges in a little "Naval Gazing" as he play-tests Action Stations - a game with no fancy graphics, but plenty of plot...

ACTION STATIONS!

First, what you don't get: this is not a graphics-intensive arcade shoot-'em-up with pretty pictures, music and sound effects. Instead, this is the type of simulation used by naval officers for training, concept testing and policy decisions. It has the same types of display, battle blots and status boards as in a ship's Combat Information Centre.

This is not a toy - If you are looking for a superficial plaything where you react instead of think, *Action Stations!* isn't for you!

I don't usually quote other peoples' reviews, but this is an exception for an exceptional game - *"Action Stations!* is very, very good. The program has more bells and whistles than a cartoon fireboat. The documentation is outstanding. The author's credentials are impeccable, and his adaptation of the manoeuvre and fire rules has been completed with flawless judgement and attention to detail. The programming is entirely professional ... for modelling surface tactical actions in the 1922-1945 period, *Action Stations!* is simply as good as it gets" - *W.J. Jurens in "Warship International".*

"The program was written by a professional naval officer who has invested seven man years into verification of the authenticity of ship interiors and development of gunfire resolution and damage control routines that realistically portray the impact every type of damage has on the ship's capacity to continue to fight" - *Lt. H.E. Dillie in "Computer Gaming World".*

It isn't a hard game to play - but it's deep. You can set a number of the ship's functions on automatic. And as you gain more confidence, you can switch off the automatic controls, one by one.

You will be required to make the same tactical decisions as Commanding Officers of the period, based on the same information. The program responds to your instructions accurately.

The 160-page manual takes you from "naval basics" to graduate level tactics, with thorough explanations easy enough for a novice yet sufficiently detailed to satisfy historians, naval professionals and gaming enthusiasts.

The program includes 186 ship and unit classes, 30 scenarios, a "Build Scenario" program where you can create your own battles, and a "Scenario Generator" where your computer can create an infinite number of new situations based on your specifications!

The scenario that caught my eye was the *Hood* and *Prince of Wales* against the *Bismark* and *Prinz Eugen* in the Denmark Strait. After a few failures as the British Navy, I tried to play the German Navy. The *Bismark* is one tough ship. When *Action Stations!* was being extensively tested against actual combat experience, in this particular battle the program determined the first hit on the *Hood* within 120 metres of where it actually occurred. Hit rates for the engagement were within 10%. The computer may have been accurate, but I needed a little practice.

Nevertheless, I did inflict heavy damage on the *Hood* relatively quickly. In wartime, this would have had the *Hood* back in dry dock for a year. I should have left then - but I was greedy. The manual teaches you that the essence of naval warfare isn't measured merely by the ships sunk, but by the missions foiled or achieved, and the cost of repair in terms of both time and money. I had achieved real success, by crippling the *Hood*. But, alas, I snatched defeat from the jaws of victory - instead of going off to safety, I continued the engagement.

I received a rather nasty hit to my bridge - a lucky shot from their light guns (200mm), I'd already disabled their heavy guns. In the confusion and fires, they lined up a couple of hits that took out my magazine - in a big way. I too was heavily damaged. I broke off the engagement and as I turned my rudder was hit. I wouldn't even be able to get back to Germany for the court martial! This isn't entertainment - it's a career!

Play: 81%
Overall: 78%

Distributed by:
DirectSoft Australia
(02) 489 7853
RRP: $79.95

Ship Status

```
   *** IDENTIFICATION ***                    (Enter (ESC) To Exit)
No.  Name   Ship Type  Class      Current/Max Search  Radar  Damage  Eng  Float
 1-GrafSpee-   CRUISER- GRAFSPEE    Speed    Lights  Class  Control Power Stat
                                    28/ 26   *OFF*   None   Teams 6 100% 100%

 *** Bridge Status ***      Air
Up - Awaiting Orders       Craft  Battery  Range  Brng  Sighting -CRUISER/
Manned and Ready             1    Target?3 8.0   -115 VISUAL

     *** WEAPONS ***       *GUN   Qty-Sz  Hits Rnds/3Mins   Ship General Info
MAIN BATTERY-(Mt#/Qty-Loc) *FIRE:  0 -11.0   0   0          List=  0 -MIDS
  #1    #2    #3    #4      Degradation: MENU FOR INFO      Radar=     None
3-BOW  3-STRN
(11.0 Inch-46.6 KYD Max Rng)* AMMO *  *DIRECTOR  *TORPEDOS*  *Ship Damage from
  #5    #6    #7    #8      Fwd Mag                Mounts     Enemy Gunfire
                             300Rnds                         Light Cal Hits-0
Fatigue Main-   Sec/Ter-    Aft Mag                T=1: 4 R 0  Med   Cal Hits-0
SECONDARY BATTERY-(Loc/Qty)  300Rnds  NO-STATUS    U     E    Heavy Cal Hits-0
 Fwd    Aft    Stbd   Port  Mid Mag  1-UP 7-UP    B=2: 4 L 0      Total Hits-0
  0      0      4      4      0Rnds   2-UP 8-UP    E      0    Torpedo   Hits-0
(5.9 Inch-28.1 KYD Max Rng)  Second   3-UP 9-      #3: 0 A 0
TERTIARY BATTERY-(Loc/Qty)   1600Rnds 4-UP 10-     N      D    !! DAMAGE INFO !!
  0      2      2      2     Tertiary 5-UP 11-    G=4: 0 S 0  For Detailed Damage
(4.1 Inch-19.3 KYD Max Rng)  1800Rnds 6-UP 12-                 Report -> See Menu
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MICHAEL SPITERI'S

Adventurer's Realm

If you are currently stuck in an adventure game, or a perplexed in a role-playing game, or maybe even sidelined in a wargame, then you have just turned to the part of the magazine that was designed especially for YOU.

Send your adventure game problems, hints, help, gossip, chat and anything else to...

Adventurers Realm, 12 Bridle Place, Pakenham, Vic 3810

Role-playing gamers should ignore the above address and write to Kamikaze Andy at his Dungeon. That address is...

The Dungeon, P.O.Box 315, Maddington, WA 6109

If you expect any sort of reply, then you must enclose a stamped addressed envelope.

Realm Chit Chat

Mrs E. Broekman of Ipswich in Queensland, and Stanley Lui of Rowville in Victoria, are two people, miles apart, who are in great need for some playing tips for *Loom*. Please write if you can help in this musical mayhem.

Meanwhile, Dennis Wyers of Drouin in Victoria wants to know where he can obtain *Gold Rush* for his C64 (MS: Try Pacific Computer Lab at the Fountain Gate Shopping Centre). Sandy O'Brien of Bendigo in Victoria is desperately seeking the game *Deja Vu*. Any suggestions for Sandy?

David Couche of St Agnes in S.A, writes: *"I've just finished reading your column in the May edition, in which you ask for comments regarding the suggestion of swapping completed games. I think it is a great idea. It certainly won't do the Australian software industry any harm - they haven't acknowledged the existence of adventure games for several years - not for the C64, anyway."*

MS: You might still find a couple of new C64 adventure game releases such as *Kings Bounty* and *Buck Rogers*. However, I agree, older C64 adventure games could be swapped for others.

We'll try it out for a little while. Send in a list of your old adventure games, as well as any old adventure games you might like, to Adventure Swap, 12 Bridle Place, Pakenham, Vic 3810. As long as we don't upset any software retailers/distributors, or don't break any copyright laws, it should be a goer.

David has difficulty obtaining the *Official Adventurers Realm Hint Book* in Adelaide. It is on sale in newsagents and some computer outlets. The book is distributed to newsagents by Network, the same mob who distribute the magazine, so ordering a copy through your newsagent shouldn't be a problem if they don't yet stock the book. It retails for $9.00, which isn't bad considering it contains hints for over forty adventure games. Ring (02)3985111for more info.

David's letter hasn't finished yet! He writes:

"Several months back, several readers were commenting on the lack of availability of adventure games. If they have access to a PC (why does the magazine hate them - my machine at work is a Commodore PC50) there are a large number of very good quality shareware and public domain adventure games on bulletin boards and through shareware distributors."

MS: As well as Shareware PC games, there are always new commercially released adventure games available every month.

This magazine doesn't hate PC's. Most of the games reviewed in the Realm (as well as in the Entertainment Section) are available on the PC, and you can always find cheap PC magazines at newsagencies if you want even more info:

On the subject of Bulletin Boards, the Official Realm BBS - Island BBS has many adventure games and hints and tips available for downloading, as well as an adventure message area where there is always someone logging on solving problems. (I'll appear once in a while to plug adventurers into the right power socket).

Island BBS currently have a great membership deal available, but you are also free to log on any time you want (24hrs a day, 7 days a week). The BBS number is (03) 7423993. ❑

Free Hint Sheets

Before you send in your problems, check the list of hint sheets below. There might be one for the game you are stuck in. Even better - they are free of charge!! Just enclose a stamped addressed envelope, and choose up to a maximum of four hint sheets and we'll zip them to you a.s.a.p. The only address to write to for hint sheets is:

Free Hint Sheets,
12 Bridle Place,
Pakenham, Vic 3810

Zak McKracken, Indy, Guild of Thieves, Jinxter, Pawn, Zork I,II,III, Maniac Mansion, Bards Tale I,II,III, Hitchhikers Guide, Faery Tale, Hobbit, NeverEnding Story Pt1, Fish, Deja Vu, Uninvited, Dracula, Borrowed Time. ❑

The Dungeon by Kamikaze Andy

I've just had a look at the Amiga conversions of *Space Quest IV* and *Rise of the Dragon*, and graphically they are excellent. For *Space Quest IV*, *Sierra* has done away with the text parser altogether, in favour of a mouse-orientated "point and click" interface (*Rise of the Dragon* uses a similar interface, probably because designers Dynamix is owned by Sierra). While this will please those adventurers who hate typing in commands, I have some reservations about the new system.

Decline in puzzles

Firstly, the emphasis in current Sierra games has shifted from puzzles to "interactive movies", which supposedly makes the adventurer become more involved with the story. To this end, Sierra has introduced "cutaway" scenes (which the player has no control over) to further develop the story of each game. Unfortunately, this has resulted in a significant and very noticeable decline in the quality AND quantity of the "puzzles" that make up each new Sierra game.

The "point and click" interface means that most of the problems that you face are "object orientated" (using a certain object in a certain location to achieve a certain objective). Not only that, the "puzzles" themselves have become increasingly absurd and repetitive, which (granted) is one of the major problems of any adventure sequel (remember, this is *Space Quest FOUR!*).

There is little or no interaction between the characters in the game (although there is a "Talk" icon, it is very rarely used, and when it is used, it only delivers a preset "speech" from each character). The most alarming fact is that such games have become incredibly easy to complete (I took only a day or so to finish both). For a game that costs over $70 (the average price of a "new" Sierra product), it is debatable whether this is value for money when more than half the game is comprised of NON-interactive "cutaway" scenes.

Sequelitis

"Sequelitis" has become common practice in today's RPG and adventure game market. While many try to cash in on the strength of a successful title, it is good to note that MOST sequels are equal to, and often superior to, their predecessors. Look at Origin's *Ultima VI* for example, surely the RPG of the year?! *Bard's Tale II* from Electronic Arts was a major improvement over *Bard's Tale I* in all departments (sadly the Amiga version of the third installment leaves a lot to be desired). *Chaos Strikes Back* was just as exciting as *Dungeon Master*. And I don't really have to say much about the late but great Infocom's line of classic games, do I?

I believe sequels ARE good for adventure gamers, and especially for role players. Most of the fun in playing a computer RPG is transferring your party of brave warriors to upcoming sequels, especially if you've grown "fond" of your characters! Such logic has seen the rise of *The Bard's Tale* series and SSI's *Advanced Dungeons and Dragons* line of RPGs, amongst others. But sequels have to be as playable (at the very least) as their predecessors, and sadly some games are not. In the end, it will be up to you, the RPGer (or adventurer, for that matter) to decide. After all, you pay for the software and yours is the ultimate say!

And if you're wondering, yes, the last three editions of the Dungeon have been a little "broad" in its terms of reference (terms of reference? Oh boy, the jargon from the Royal Commission here in WA is beginning to catch on...). However, they all do have a direct link with RPGs since (1) The RPG market will be a vital one for the CDTV (May 1991 Dungeon), (2) Almost EVERY adventure and RPG requires a hard drive on the Amiga today (last month's Dungeon), and then there's this month's Dungeon, which looks at the question of the evolution of the RPG and adventure game. Not to worry, I'll be back to my old self next month, hopefully with some news about the Summer CES show in Chicago! Ciao!

Problems, Problems & more Problems or the Troubled Adventurers Dept.

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went to the trouble of sending in help and hints.

Firstly, Zaun Bhana was stuck back in March 91 in *Deja Vu II*.

David Marjanovic sends in the following hint for *Zaun*....

"Visiting the Mayor or the Police Chief is not important as you have to prove your innocence to Malone. Also, you do not need to get past the drunk as Sugar Shack's apartment is the lower door."

Peter Cain (Warrnambool, Vic) comes to the rescue of Noel McAskill who was stuck in *Operation Stealth* in April 91. David writes...

"After freeing yourself, swim over to the girl and then give the command OPERATE GIRL and that will untie her. This must be done as quickly as possible as you will not make it back to the surface."

David Marjanovic also sent is a tip similar to the above.

Alex Stivala offers help to Axl Batroc, whose *Neuromancer* problem appeared in the May 91 realm. "Comlink 6.0 can be downloaded from the Tozoku Imports database. The link code is Yakuza, password is Yak."

Peter Nuzum, one of the contributors to the *Zak* hint sheet, sends in many hint and tips to those stuck in the pro-pack adventure games. So, to Richard McNair (Jan 91), Brian Blackwell (Feb 91 & April 91), Dennis Wyers (April 91), and anyone else stuck in these games, relief is here at last....

Game: Temple Curse

Help: Chisel the ring to release it from the flint. To cross the pool, ROW WEST. The maze leads to several different rooms. Move in four directions with the first three directions being common for each room. You need the ring and the blue stone to enter the porthole.

Game: Island of Spies

Help: Board the boat and get off at the river bank. To start the truck, press the button and push the pedal. Tie the rope to the truck and the rock before entering the truck. Get the parachute, wear it, pull the lever and then pull the ripcord.

Game: Last Planet

Help: Use the flint to get the rope. To wear the boots, typewear boots. Climb the stalactite to see the drawing.

Help, Help & more Help or the Smart Adventurers Dept.

Trevor Foster of Junction Hill in NSW wants hints for endless lives in *Rick Dangerous I* and *II*. (Note: This is an arcade hint that sneaked in - others will be obliterated as security measures are stepped up!!).

Mike Fama of Kenmore in Queensland is stuck in a few golden oldies. In *Skull Island*, what do you do in the tunnel across the lake (light lamp? with what?). Do the pirates, footprints, jungle, waterfall, and dam have any significance? In *Macbeth*, how do you turn the capstan to lower the drawbridge? In *Dungeon Adventure* (Level 9), how do you pass the jelly monsters? Finally, in *Gremlin*, Mike wants to know how to use the camera, how to find out what the peltzer is, and how to deal with the dart-throwing gremlin.

Speaking of Golden Oldies, Kristian Adamson of Springwood in NSW, would like to know where to find the second key to open the second magical door in *Kings Quest II*.

Peter Nuzum of Lara in Vic is not progressing in *Labyrinth* due to some mind technicalities. He would like to know how to open the safe in the bank, and in the gallery, and how does he use the lute and sing the song?

CLEVER CONTACTS

Alex Stivala has passed a nasty problem to the Realm. Geraldine Hassall is stuck in a different version of *Kings Solomon's Mines*. After cutting the rope with the crystal, head-hunters get her five moves later. What does she have to do?

James White of no fixed abode is stuck in a mixture of arcade and adventure games. If you can help out, please write to Phil Campbell's Entertainment Bit. The games are... *Outrun, Turbo Outrun, Fire and Forget II, Shinobi*, and *Black Tiger*.

Stanley Lui of Rowville in Victoria has almost given up in *S101: Sorcerers Get All The Girls*. He wants to know how to save souls at the Island of Lost Soles. Any takers?

Veteran adventurer David Marjanovic (Revesby, NSW) would love some hints for *Ooze*, and exact terminology for operating the pillar in Mortville Manor. (If you write to David at P.O Box 342, Revesby, NSW 2212, he can help you out with *Manhunter II*).

Finally, Dennis Wyers of Drouin in Vic would like any hint and tips for the original *Last Ninja* (for example, how does he move past the fire breathing dragon in the second stage). ❑

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